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UNIVERSITY OF SAN DIEGO

Hahn School of Nursing and Health Science

DOCTOR OF PHILOSOPHY IN NURSING

VIOLENCE, DEPRESSION, PARENTAL STRESS, AND CHILD NEGLECT AMONG HIGH RISK POSTPARTUM WOMEN

by

Kristen D. Lambert, MSN, RN

A dissertation presented to the

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requirements for the degree of

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Abstract

The purpose of this study was to characterize a vulnerable population of postpartum women at risk for family violence and maladaptive outcomes and to determine the degree the identified attributes increase the risk of child neglect and psychological aggression. Lazarus' Appraisal Theory and Scaer's Traumatic Spectrum framework provided a conceptual basis to examine the interrelationships between intimate partner violence (IPV), depression, previous traumatic history, and child neglect. A descriptive correlation design using secondary analysis of longitudinal data collected for the Healthy Families San Diego Clinical Trial was used. Standardized measures including the CTS, CTS2, CTSPC, CES-D and PSI were administered to obtain information about severity of intimate partner violence, parental stress, depression, child neglect, and psychological aggression toward the child at four points in time. Descriptive findings are presented. Logistic regression was conducted to determine which of six selected independent variables increased the (a) risk of child neglect and (b) mother to child psychological aggression. Increased parental stress was found to significantly increase odds for child neglect (p = .003), with a significant increase in the odds for mother to child psychological aggression with increased parental stress (p = .017) and the presence of intimate partner violence—physical abuse (p = .020) and psychological abuse (p = .000). Implications for nursing research, education, practice, and health policy are discussed.

Keywords: violence, family violence, interpersonal violence, intimate partner violence, domestic violence, wife battering, child maltreatment, child neglect, child abuse, psychological aggression, maternal depression, parental stress

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DEDICATION

This study is dedicated to my daughters, Caitlin and Carly who inspired me to never stop reaching, never stop hoping and never stop giving. It is for them that I study the effects of violence on women in the hope they will never find themselves in a relationship marred by violence and uncertainty.

ACKNOWLEGEMENT

If it were not for the kindness, wisdom and patience of Dr. Cynthia Connelly, I would not have had the opportunity to develop and explore my own potential as a scholar, researcher and educator. She never gave up and consistently offered her expertise and guidance. I am grateful for her direct, straight forward style and authentic presence. Her knowledge base is unparalleled and her compassion boundless. I am truly blessed to have had the opportunity to work with such a brilliant and dynamic research scientist, scholar, nurse and woman.

I would also like to thank a woman of great intellect and compassion; Dr. Jane Georges who offered me another perspective. I will forever be in awe of her strength and determination.

Finally, my appreciation goes out to Dr. Andrea Hazen, a gentle, dedicated scientist. Her devotion to the study of women and children is inspiring.

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CHAPTER I

INTRODUCTION

> The twentieth century will be remembered as a century marked by violence. It burdens us with its legacy of mass destruction, of violence inflicted on a scale never seen and never possible before in human history. But this legacy, the result of new technology in the service of ideologies of hate, is not the only one we carry, nor that we must face up to. Less visible, but even more widespread, is the legacy of day-to-day individual suffering. It is the pain of children who are abused by people who should protect them, women injured or humiliated by violent partners, elderly persons maltreated by their care givers, youth who are bullied by other youths and people of all ages who inflict violence on themselves (Mandela, 2002).

Violence impacts nations, cultures, societies, communities, and families. The face of violence is hidden in shame, humiliation, pride, and dishonor. Clouded by fear, pain, torment, and retribution, violence is lauded by power, control, hate, and domination.

The concepts of social justice, gender equality, and human rights all speak to the cost of violence within a society. Some will pay the ultimate price while others might wonder if the cost of survival is actually greater than that of death. When violence is present, health is compromised. The health of families, communities, societies, and nations is dependent on detection, prediction, and prevention of the complexities of violence and violent acts among individuals. Preventing disease and illness includes understanding the intricacies of violence and the potentially harmful outcomes associated with aggressive acts.

Background

Violence. For many, the global aspect of violence while devastating, remains somewhat distant and removed from day to day life. Yet, for a significant number of individuals, violence has become a way of life. Approximately 1.6 million lives are lost each year to violent acts (Krug, Dalhberg, Mercy, Zwi, & Lozano, 2002). Children suffer indescribably heinous acts of violence from those charged with protecting and nurturing them. An estimated 906,000 children are victims of abuse and neglect every year (United States Department of Health and Human Services: Administration for Children and Families, 2009). Peer to peer violence in schools has reached epidemic levels, with the most extreme form of retaliation culminating in school shootings and suicide. The United States has the highest youth homicide rate among the 26 wealthiest nations, the second leading cause of death among 15 to 19 year olds (Centers for Disease Control and Prevention [CDC], 2009).

In addition to the tragedy of child abuse, neglect, and peer violence, the increase in the number of service members returning from combat with stress related illnesses

directly attributable to the atrocities of war is alarming. The estimated risk for posttraumatic stress disorder (PTSD) from service in the Iraq War is 18% (Hodge, Castro, Messer, McGurk, Cotting, & Koffman, 2004), while the incidence of suicide among returning service members is the highest in three decades, surpassing the national average (Kuehn, 2009).

Murder, suicide, and rape also continue to plague our society, while men and women continue to engage in destructive, abusive relationships. The National Violence Against Women Survey (NVAWS) found that 22.1% of women and 7.4% of men experienced physical forms of intimate partner violence (IPV) at some point in their lives (Tjaden & Thoennes, 2000b). The outcomes often associated with these damaging, dangerous relationships have the capacity to dramatically affect the health and welfare of the identified victim, and by association, affect the way future generations respond when injured, hurt, angered, or frustrated.

The World Health Organization (WHO) in its landmark report on violence (Krug, Dalhberg, et al., 2002), emphasized the belief that no one goes untouched by violence. Because of its pervasiveness, many have come to believe that violence is an inevitable part of life; something to react to rather than prevent. Yet studies have shown this is not the case. Prevention is possible when viewed through a comprehensive, integrative lens. WHO and the CDC have declared violence a public health priority. In moving towards a public health approach to violence, both seek to limit the tendency of well-meaning social and healthcare scientists to fragment violence into special interests groups. They hope to

apply public health principles to the complex phenomenon of violence, by addressing the problem in a comprehensive, holistic fashion.

The premise of this approach includes the conviction, based on empirical evidence, that violent behavior and its consequences can be prevented. As a complex, interactive issue, the roots of violence lie in the interrelationship of biological, social, cultural, economic, and political factors. Krug et al. (2002) note "while some risk factors may be unique to a particular type of violence, more often, the various types of violence share a number of risk factors" (p.15). This approach seeks to determine common patterns often observed in the study of violence through the utilization of the four levels of the ecologic model that include a) biological and personal history factors that influence how individuals behave and increase their likelihood of becoming a victim or perpetrator of violence, b) close relationships such as those with family, friends, intimate partners, peer, and explores how these relationships increase the risk of being a victim or perpetrator; c) the community context in which social relationships occur, to identify the characteristics of these settings that increase the risk for violence; and d) broad, society factors that help create a climate in which violence is encouraged, cultural norms promoting parental rights over child welfare, and the perpetuation of male dominance over women and children (Krug et al., 2002).

Family Violence. In keeping with the conviction of these well respected organizations, the exploration of family violence, specifically IPV and child neglect was selected as the focus of this research study. Integral to this study is the belief that the family is an emotional unit whose connectedness and reactivity make the functioning of

family members interdependent (Bowen, 1978). If the universally established goal of creating healthy family environments is to be understood and realized, the family must be visualized as a central component of society. Martinson (1970) in his work on the family and society noted "the family is viewed not as an isolated phenomenon but as a unit significant and essential to society. The family is a social system that is responsive to the cultural and social milieu in which it operates" (p. ix). Clearly, the study of family violence continues to be a necessary element in the drive to create healthy, strong family relationships and to prevent the perpetuation of intergenerational violence.

Viewed as the most common form of violence throughout the world, family violence (also referred to as domestic violence) is an extremely complex phenomenon. It encompasses violence between intimate partners, child abuse, neglect, sibling abuse, as well as elder and dependent adult abuse. Violence harbors a vast spectrum of influence within a family system. Of special interest in this study is the exploration of risk factors including IPV, maternal depression, parental distress, mother's history of childhood abuse and to examine to what degree these factors increase the odds of child neglect and mother to child psychological aggression.

As the foundation of the family system, parents set the tone for other relationships within the family. When violence becomes a part of that relationship, it changes the dynamics of the family system; affecting all members in significant ways. Though the primary target (most often the female) suffers the direct consequences of the psychological, physical, or sexual abuse inflicted by the perpetrator, the most vulnerable members of the family, the children, directly or indirectly, suffer an equal, if not more

enduring trauma as a result of the violence perpetrated against their parent. While the odds of abuse for other family members (children) increase in the presence of intimate partner violence, research indicates that children do not need to be the direct target to suffer maladaptive outcomes as a result of the violence within the household (Edelson, 1999a). It has been reported that children who witness parental violence have similar responses to those children exposed to other forms of child maltreatment (American Psychological Association [APA], 1996). Some researchers feel that direct exposure to IPV constitutes child neglect in that a parent failed to protect the psychological, emotional, and physical integrity of the child (Edelson, 1999a; Straus, 1992).

Intimate partner violence and the outcomes associated with violent interpersonal relationships can have a significant impact on the health and well-being of the mother. A common outcome associated with IPV is development of serious mental health issues including maternal depression and anxiety disorders (Kumar, Jeyaseelan, Suresh, & Ahuja, 2005; Zlotnick, Johnson, & Kohn, 2006). Each of these maladies may seriously impair parental judgment and a mother's ability to nurture and provide a safe, healthy environment for her child; potentiating a scenario that may include child abuse, neglect, and psychological aggression toward the child. The relationship that parents, particularly mothers, have with their children is a compelling predictor of a child's future development even into adulthood (Geffner, Igelman, & Zellner, 2003).

Child Maltreatment. Child maltreatment continues to be a significant health risk within our society (Appel & Holden, 1998). The overlap between IPV and child maltreatment is well documented (Appel & Holden, 1998; McCloskey, Figueredo, &

Koss, 1995). Children living in violent homes are at increased risk for being victims themselves and at increased risk of neglect (Campbell & Levandowski, 1997). Child abuse has traditionally garnered significant public attention. Neglect, while more prevalent and equally devastating to the child, has not received the same amount of scrutiny and interest within the research community. Yet, the pervasiveness of neglect continues. Child Protective Services estimates approximately 2.3 million children are victims of abuse and neglect each year and an estimated 1,760 die (2.3 children per 1,000). Almost half of these deaths are due to neglect, one quarter physical abuse, and one quarter to sexual abuse or other forms of abuse (National Data Archive on Child Abuse and Neglect [NDACAN], 2004).

Child Neglect. Child neglect remains a significant piece of the family violence puzzle; difficult to identify and challenging to treat. For many, neglect is the norm. It is often invisible, especially emotional neglect and psychological aggression. Yet, studies show that neglected children are at great risk for physical issues, including impaired brain development (Glaser, 2000), cognitive developmental delays, behavioral, and emotional maladies (Evans, Davies, & DiLillo, 2008; Silverstein, Augustyn, Cabral, & Zuckerman, 2006), as well as long term mental health concerns such as depression, stress related disorders, aggression, and substance abuse (Graham-Bermann & Edleson, 2001; Jaffe, Baker, & Cunningham, 2004; Wolak & Finkelhor, 1998).

Unless children demonstrate physical signs of neglect, mandated intervention is unlikely. Young children are extremely vulnerable to behaviors associated with neglect, as they are unable to speak for themselves (Jaffee, Caspi, Moffitt, & Taylor, 2004).

Research indicates that children are at greatest risk for neglect before the age of four (Edleson, Mbilinyi, & Sudha, 2003). Therefore, identifying risk factors early, prior to a child entering the school system is crucial to their care and well-being. Similar to combat veterans experiencing posttraumatic stress disorder, children who are neglected at a young age often remain in a constant state of hyper-arousal; in continual readiness for threats to their fragile, developing systems. This state of constant arousal does not promote the attentive calm necessary for active learning to take place; leaving the door open for impairment later in life including violence, aggression, anxiety, and depression (Osofsky, 2003).

In determining an approach to studying child neglect, public health researchers often choose an ecological model; defining neglect on the basis of the child's unmet needs from the perspective of the parents, the community, and society. Dubowitz, Black, Starr, & Zuravin (1993) concur and promote a broader view of the environment in which the child lives when discussing neglect. However, much of the available research has focused on socio-legal processes; looking primarily at environmental aspects including inadequate parenting. This study seeks to bridge the two viewpoints by characterizing high risk postpartum mothers; exploring the relationship between neglect and maternal stress factors using a trauma/systems framework. This investigator aspires to describe a vulnerable population of new mothers and to improve clinical nursing practice and care of a marginalized population through the use of enhanced prevention and identification strategies including universal assessment within all healthcare settings, while outlining expectations for nurses in direct care settings using a trauma informed approach to patient

care. Studying a high risk population promotes the illumination of psycho, social, emotional, and economic problems often found in families who neglect their children; issues that lead to distorted perceptions of the child, their needs, and behaviors (Crittenden, 1993). It is hoped that the information secured will provide valuable evidence about the nature and cohesion of neglectful families.

Identification of the Problem

The health of families, communities, societies, and nations is dependent on the detection, prediction, and prevention of the complexities of violence and violent acts among individuals. Preventing disease and illness includes understanding the intricacies of violence and the potential harmful physical, emotional, and psychological health outcomes associated with aggressive acts. "One of the greatest contradictions of human nature is that some of the most personally injurious behaviors occur among loved ones" (Arriaga & Oskamp, 1999, p. 3). Violence within the family structure continues to be an area of great concern and interest to anthropologists, psychologists, and social scientists; especially those within the public health system. Family violence not only includes physical violence, but economic subordination, extreme coercion, intimidation, isolation, and other control tactics; a form of violence Johnson (1995) refers to as "patriarchal terrorism" (p. 285).

The aspect of family violence of interest in this study includes violence between intimate partners, mother's previous history of maltreatment as a child, and the impact on child neglect and mother's psychological aggression towards the child. The tragedy of family violence lies in the negative impact it has on the victims including physical

injuries and psychological maladies such as depression, posttraumatic stress disorder (PTSD), anxiety, substance abuse, and in the potential perpetuation of generationally transmitted maladaptive outcomes through direct and indirect exposure of children to IPV and its effects (Hampton, 2006).

While there are many factors that impact a child's development, it is generally accepted that the mother, when in the position of primary care provider, plays a significant role in the development of her children. Many studies have reported the presence of depression among women experiencing IPV (Golding, 1999) and yet there remains a great deal to learn about the affect a mother's depression has on her perceived stress and competency as a parent. Previous studies indicate that IPV and maternal depression may negatively affect the mother child dyad as symptoms of maternal depression are not conducive to attentive, supportive parental responses (Goodman & Gotlieb, 1999). Researchers have consistently found associations between maternal depression and adverse child outcomes (Downey & Coyne, 1990; Goodman & Gotlieb, 1999). It is believed that children of depressed mothers are at risk for negative outcomes including neglect and psychological aggression due to the effect of the depressed mother's behavior on early developing psychobiological systems related to emotional expression and regulation. Because this dynamic has the potential to have a great impact on a child's growth and development, it continues to be a topic worthy of further study and exploration.

Identification of families at risk for violence and the associated risk factors continues to be an area in need of investigation as complacency, especially within the

mental health setting has moved the focus from the family to the individual. The problem with this approach includes the tendency to compartmentalize care, when a systems approach might serve to address the needs of all family members, especially the children within the family. Children are often the hidden victims of family violence, suffering maltreatment at the hands of their parents, who may also be suffering the effects of violence. Child maltreatment, specifically neglect and psychological aggression, remain an understudied area within family violence research.

Family violence is a multifaceted issue. The literature is conflicted in its commitment to a specific conceptual framework to inform studies in the area of family violence. Mental health practitioners tend to pathologize the dynamics, behaviors, and description of intimate partner violence, while community based advocacy groups see behaviors associated with the trauma of violence as adaptive, rather than pathological (Warshaw, Gugenheim, Moroney, & Barnes, 2003). Due to the extremely complex nature of relational violence, the decision to integrate two dramatic models: Lazarus' Appraisal Theory of Psychological Stress and Emotion (Lazarus, 1999) and Scaer's Construct of Traumatic Spectrum (Scaer, 2005); a meta-theoretical systems outlook to describe the interactive properties of the mind, emotions and actions/adaptations were chosen as the conceptual framework for this study.

Purpose of the Study

The purpose of this study was to (a) characterize a vulnerable population of postpartum women at risk for family violence and maladaptive outcomes, and (b) identify maternal factors that increase the risk of child neglect and mother to child psychological

aggression. Lazarus' Appraisal Theory (Lazarus, 1999) and Scaer's Traumatic Spectrum Framework (Scaer, 2005) provided a conceptual basis to examine the relationships between intimate partner violence, depression, mother's childhood history of abuse, parenting stress, demographic characteristics (mother's age at time of child's birth, child's gender, marital status, and race/ethnicity), child neglect, and mother to child psychological aggression.

Study Aims

The three aims of the study are

1. to systematically examine intimate partner violence, maternal depression, mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers;
2. to describe the relationships between intimate partner violence, maternal depression, mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers;
3. and to explore maternal factors that are most likely to contribute to the incidence of (a) child neglect and (b) mother to child psychological aggression among high risk postpartum mothers.

Implications for Nursing Practice

Women and children exposed to family violence are at considerable risk for untoward outcomes including depression, anxiety, substance abuse, neglect,

psychological aggression, and the perpetuation of intergenerational violence. Nurses have the opportunity to have a direct impact on women, children, and families caught in the cycle of violence associated with IPV and child maltreatment. As a group, nurses are in a prime position to prevent, identify, and provide assessment and support to families in crisis in both the outpatient and inpatient healthcare setting. Yet, there appears to be a sense of apathy and powerlessness (Soglin, Bauchat, Soglin, & Martin, 2009) among health professionals in terms of asking the questions that may make a difference in the life of women and their children. Many nurses consider the process too complex and time-consuming; yielding less than desirable outcomes as they do not believe reporting violence will protect the victim and may even place them in greater danger. In addition, many nurses harbor unfounded stereotypes regarding the gender and behavior of the typical perpetrator and/or victim; unaware that violence crosses all socio-economic, gender, educational, cultural, racial, and religious lines.

Though aware of the destructive impact IPV has on the family, many nurses lack the knowledge, skill, and determination to conduct comprehensive, meaningful assessments of those most vulnerable to violence and may miss key indicators of abuse and neglect. Due to the continued prevalence of IPV and the potential for devastating untoward outcomes, most experts in the field recommend routinely assessing all women for IPV in all healthcare settings (Cole, 2000; Soglin et al., 2009). Mandated assessment and reporting laws have marginally improved the cursory assessment of women in the emergency room setting, yet regulating nurses to ask specific questions may not produce the desired outcome: identification of current IPV (Kripke, Steele, Obrien, & Novak,

1998; Roberts, Lawrence, O'Toole, & Raphael, 1997). The difficulty in identifying current IPV is well documented throughout the literature (McCauley, Yurk, Jenckes, & Ford, 1998). Soglin et al. (2009) found that focused inquiry intervention by nurses did result in a significant increase in identification of lifetime IPV though not current IPV. It is believed that merely providing nurses with *education* on the signs and symptoms of abuse will not produce the desired result of enhanced identification of current abuse and patient focused safe intervention strategizing. Rather, providing nurses with in depth evidence-based information including findings from this study (and others) as well as clearly outlining expectations for nurses in direct care settings will assist nurses in developing best practice guidelines aimed at providing prevention strategies as well as patient/family centered options for families in crisis. In addition, in promoting prevention using a trauma informed framework, nurses may feel empowered to support these families in making very difficult decisions. Providing nurses with empirical data in the context of their specialty, promotes a holistic approach to patient care, rather than a solely task oriented approach.

This study also hopes to provide another valuable tool to nurses in direct patient care areas. In learning more about the damaging effects of intimate partner violence, nurses have the opportunity to make the vital connection between IPV and child maltreatment, noting that IPV may serve as a red flag to the potential presence of child abuse and neglect. Recent data has shown that 30%-60% of households with violence between intimate partners also harbor instances of child abuse and neglect (Appel & Holden, 1998; Edleson, 1999). In addition to the potential for abuse and neglect of

children in the home, the literature notes that 45%-60% of women engaged in a violent intimate relationship may suffer from depression, anxiety, and substance abuse. This statistic is significant as mental illness or substance abuse may restrict a mother's ability to care for herself and/or parent her child(ren) (Goodman & Gotlieb, 2007). Though many women feel they are protecting their children from their abusive father by enduring the violence within a relationship, they may not realize that the children are being emotionally traumatized/abused even if they are not the primary target. Similarly, a mother that uses substances to deal with the pain and suffering inherent in an abusive intimate partner relationship is also placing her children at an increase risk for abuse and neglect as judgment and insight are often reduced (Straus, 2004).

To mitigate the complex effects of family violence, nurses must not only comply with the current legal obligation to report family violence when suspected during the course of their daily practice; they ought to consider the moral and ethical implications of uncovering violence within the family, amplifying the influence a healthcare professional can assert in the life of the family. Nurses are encouraged to broaden their perspective and consider not only the individual seeking treatment, but the entire family system. In providing a thorough, holistic, trauma informed assessment, nurses have the opportunity to prevent child maltreatment by utilizing strategies designed to reduce underlying causes and risk factors and to improve and strengthen protective factors. To leave women and children vulnerable and unsafe because the nurse feels *uncomfortable* asking specific, focused questions, shifts the focus from patient-centered care to nurse-centered care; an undesirable model.

In understanding the outcomes associated with IPV, such as maternal depression and the potential for child maltreatment, nurses may be more prepared to engage in preventive intervention strategies. Engaging nurses in the process of identifying family violence serves to offer some hope to families struggling to provide a safe, nurturing home, and reduce the potential for the perpetuation of generational violence.

Finally, the implications regarding the utility of using Lazarus' Appraisal Theory of Psychological Stress (Lazarus, 1999) and Scaer's Traumatic Spectrum (Scaer, 2005) as a conceptual framework for assessing women at risk for IPV, providing care, and treatment as well as preventing and conceptualizing the potential for child maltreatment for women and children within this vulnerable population are extensive for nursing practice. In providing an alternate paradigm to describe the bio-psycho-social-spiritual response to a traumatic experience, nurses may move from overlooking a violent history and pathologizing reactions to trauma, to viewing the woman through a holistic lens, thereby addressing not only the emotional and physical pain, but social factors that imprison women in violent relationships (Warshaw, Gugenheim, Moroney, & Barnes, 2003).

This study offers the opportunity to explore the lives of 487 women, identified as high risk, immediately after the birth of their child and annually for the first three years of the child's life. In reviewing this valuable data set, this investigator hoped to develop a characterization of women identified as high risk and determine the relationships and potential outcomes associated with a previous history of child abuse, intimate partner violence, parental stress, maternal depression, and the prevalence of child neglect and mother to child psychological aggression. The findings of this study will add to the data

currently available on the risk factors associated with child neglect and psychological aggression in a high risk population and assist in developing prevention strategies for families in crisis. The data will also serve to provide nurses with evidence based strategies focused on the nurse's role in prevention, assessment and interventions for families and in so doing, advance the science on the disturbing, damaging, often invisible phenomenon known as family violence.

CHAPTER II

REVIEW OF THE LITERATURE

Violence: A Universal Phenomenon

One of the most noteworthy reports on violence in the last decade was *The World Report on Violence and Health* (Krug et al., 2002) that identified an increase in intentional violence propagated by and against people of all ages and genders, especially women and children, and declared violence as a globally significant public health concern. Recognized as a complex phenomenon, culturally influenced, morally defined, and continually evolving, violence encompasses a wide range of behaviors including: a) self-directed violence as seen by suicidal behavior, b) interpersonal violence including youth violence, child abuse and neglect, intimate partner violence, and c) collective violence as manifested by violence between nations including terrorism, and displacement of people. In addition to the fundamental concern for the health and welfare of society, the economic impact of violence has also been identified as an issue of concern. The loss of productivity, the reduced quality of life, and increased use of resources in addition to the often profound physical, psychological, and spiritual harm sustained to individuals, highlight the need to include stakeholders at all levels in a

collaborative approach to the reduction and prevention of violence.

Interpersonal violence continues to be an area of great interest and ongoing concern among many social science researchers. Violence that occurs in families is often chronic, occurring over long periods of time with varying outcomes. The historical development of social attitudes, in addition to the initiation of concentrated research by social scientists began in the late twentieth century and was heavily influenced, initially, by animal rights advocates and later by feminist activists (Martin, 1981). This *discovery* led to the increased understanding and support for victims and heralded a new focus on identification and reporting of violent acts within the home. Though family violence remains widely under-reported, it is estimated that over two million families are affected by violence annually (United States Department of Health and Human Services [USDHHS], 2009). It is, therefore, the objective of this review to synthesize the current literature and determine areas in need of further research and exploration.

Family violence is a well studied topic making the review of the literature challenging. Multiple databases were used to search for literature relative to the topic of family violence. Databases included Child Abuse, Welfare and Adoption, CINAHL Plus, ERIC, Evidence Based Medical Reviews, Evidence Base Mental Health, Journals at OVID, JSTOR, PsychArticles, Psych INFO, and PubMed. Specific search terms used included violence, family violence, interpersonal violence, intimate partner violence, domestic violence, wife battering, child maltreatment, child neglect, child abuse, psychological aggression, maternal depression, and parental stress. The search produced

a significant number of documents for review. Further delineation/categorization was required in order to construct a manageable list for analysis.

Defining the Phenomenon of Violence

Over 1.6 million people worldwide lose their lives to violence each year (Krug et al., 2002). For the past 30 years, researchers have focused on gathering data on risk factors, behaviors, and outcomes associated with violence; spending countless dollars on prevention and intervention strategies to reduce the prevalence and impact of its affects. Yet one of the barriers to studying violence has been the lack of a standard set of definitions and a valid and reliable data collection method. Enhancing the capacity for collecting data on violence attaches a level of legitimacy and importance to the topic and assists in the process of defining priorities, increasing collaboration, and promoting the integration of violence prevention into current social and educational policies.

A Standardization of Terms. Defining the terms used in the study of violence has been a great challenge to researchers. The lack of standardized definitions has further complicated the study of violence. Like many national and international agencies dedicated to assessment and recommendations on current health needs throughout the world, WHO recognized the difficulties inherent in studying the underpinnings and status of violence. In 1996 in an effort to define and identify the properties of violence, the World Health Assembly asked WHO to develop a typology of violence; outlying specific categories of violence and the links between them. WHO defined violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of

resulting in injury, death, psychological harm, mal-development or deprivation" (Krug et al., 2002, p. 5). This definition associates intentionality with committing the act itself, irrespective of the outcome it produces.

Typology of Violence. WHO divided violence into three distinct sub-categories based on the characteristics of those committing the violent act. These include a) self-directed violence, b) interpersonal violence, and c) collective violence; the categories include physical, sexual, psychological, and deprivation or neglect (Krug et al., 2002). Defining the nature of violence provides a more descriptive outline of the phenomenon. Though these categories are not mutually exclusive, they provide a universal classification system for those interested in the study of violence. These definitions will be utilized in the study to ensure standardization and continuity of definitions and terms.

The Construct of Interpersonal Violence. The focus of this study includes the relationship-based construct of interpersonal violence. Interpersonal violence encompasses a wide array of affiliations including a) family and intimate partner violence that generally takes place in the home; and b) community violence between individuals that are unrelated and may not even know one another, generally taking place outside the home. The exploration of family violence and the associated outcomes is of interest.

To fully understand what is meant by *family violence* the definition of family must be agreed upon. For the purposes of this study, family refers to a range of relationships among people, whether or not they have blood ties or fit the legal or religious definitions of family and include a) traditional nuclear families, b) extended families, c) step-families, d) intimate partners (individuals who may or may not married),

e) former intimate partners, f) families of choice (created by people who choose to consider themselves family), g) families who live apart or together, h) gay and lesbian families, and i) individuals not related by blood or marriage but who have assumed a family role (American Psychological Association [APA], 1996).

Though all relationships referred to as family are not legally and morally equivalent, the term infers a range of relationships that are significant to the individual and collective group. Bowen (1978) views the family as an emotional unit, asserting that a family and its members are intensely connected emotionally. A disruption affects all members and changes the dynamics of the family system. Violence represents an extreme disruption within a family, affecting the emotional connectivity, safety, and development of family members resulting in various untoward outcomes. Family violence is further defined by the identification of the victim including intimate partner, child, dependent adult, and elder maltreatment (Krug et al., 2002).

Family Violence. What constitutes family violence is not always clearly defined. In the context of this study, family violence refers to acts of physical, psychological, and/or sexual abuse/neglect within a relationship between intimate partners, and/or a parent/primary caretaker and child; chronic situations in which one person controls or intends to control another person's behavior. It also includes a misuse of power that may result in injury or harm to the biological, psychological, social, economic, sexual, or physical well-being of individual (APA, 1996). Child maltreatment, specifically child neglect and psychological aggression are the components of family violence of interest. The extent, consequences, and preventability of child neglect are considerable. Recent

research has focused on abuse, neglect, and the developing brain during infancy and early childhood indicating that brain development can be altered by relentless, erratic, or severe stress. The experiences and outcomes endured as a young child form the basis of the developing personality, intellect, and emotional stability, leaving the child potentially devoid of emotion, remorse, or capacity for empathy (Butchart, Harvey, Mian, & Furniss, 2006; National Clearing House on Child Abuse and Neglect, 2001). Identifying risk factors that increase susceptibility for child neglect serves to add to the current knowledge and assists in the development of intervention strategies to prevent further deterioration of the child's intellectual, emotional, and social development and provide the opportunity for healing.

The effects of violence on a developing child are substantial. Physical, emotional, and mental health issues are only a few of the devastating outcomes associated with child maltreatment (Paranjape, Sprauve-Holmes, Gaughan, & Kaslow, 2009; Romito, Pomicino, Lucchetta, Scrimin, & Molzan, 2009). Child maltreatment refers to the "physical and emotional mistreatment, sexual abuse, neglect, and negligent treatment of children" (Butchart et al., 2006). Many of the more dramatic expressions of violence including child physical and sexual abuse have received a great deal of attention from researchers and the media. However, the faces that largely go unnoticed are those of children suffering the often chronic pattern of neglect. Child neglect and psychological aggression used towards a child remain extremely prevalent, underreported, and understudied.

An Act of Omission: The Silent Phenomenon of Child Neglect

> Neglect is a matter of things undone, or inaction compounded by indifference. Since it goes on at home, it is a very private sin. Seldom does it announce its presence in direct, unmistakable terms. We may infer it from the marks it leaves on children that are immediately visible, although it often remains unrecognized until we must deal with its effects on the personality of a damaged adult (Polansky, Chalmers, Williams, & Buttenwieser, 1981, p. 1).

Early in the study of child maltreatment, Polansky, Hally, & Polansky (1975), advanced a working definition of neglect to address intent and conscious motivation by the parent by emphasizing the circumstance of the child's life, rather than the characteristic of the parent by using the term *avoidable present suffering*. This distinction forced professionals to consider the probable impact of any action or inaction. Polansky et al., (1975) advanced their definition of neglect by identifying neglect as a condition in which a caretaker responsible for the child either deliberately or by extraordinary inattentiveness permits the child to experience avoidable present suffering and/or fails to provide one or more of the ingredients generally deemed essential for developing a person's physical, intellectual, and emotional capacities. Their work highlights the assumption that it is the role of the parent to provide the optimum environment for a child to grow and thrive. When those goals are not met, neglect may result.

The current accepted definition of neglect, a form of child maltreatment, refers to the failure of a parent or caregiver to provide for the development of the child, where the parent is in a position to do so in regard to a) health, b) education, c) emotional

development, d) nutrition, e) shelter, and f) safe living conditions. It is distinguished from circumstances of poverty in that neglect can occur only in cases where reasonable resources are available to the family or caregiver. Child neglect is further defined by state and federal laws and includes

1. physical neglect: failure to provide adequate food, clothing, shelter, medical care, hygiene, protection, and supervision and accounts for the majority of reported cases of child maltreatment. It also includes abandonment, isolation, malnutrition, failure to control the use of drugs/or alcohol, and physical harm;
2. emotional neglect: failure to provide security, emotional support, love, affection, and psychological care when needed. Included in this category is exposure to IPV. Behaviors include: a) ignoring or consistently failing to respond to the child's need for stimulation, b) rejecting or actively refusing to respond to a child's needs, c) verbally assaulting as evidenced by name calling, threatening, or belittling; d) isolating or preventing the child from engaging in normal social contacts, e) terrorizing or threatening a child with extreme punishment, and f) encouraging a child to engage in destructive or illegal antisocial behavior (American Humane, 2009);
3. educational neglect: failure to enroll a child of mandatory school-age in school, failure to ensure attendance in school, and a failure to address educational needs. A total of 21 states include failure to educate the child as required by law in the definition of neglect. Home schooling using a

structured curriculum is viewed as a viable alternative to current school enrollment. Educational neglect can lead to a child failing to attain specific skills needed to succeed in life. In addition, the refusal to attend to a child's educational needs may lead to school dropout, threatening the emotional, psychological, social growth, and development of the child. It may also lead to the engagement in disruptive, self-destructive behaviors (American Humane, 2009); and

4. medical neglect: refusal, disregard, or delay in seeking medical care when financially able to do so, resulting in harm or risk of harm to the child's health (Krug et al., 2002).

The categories are not mutually exclusive and demonstrate some overlap (Krug et al., 2002). Child Abuse Prevention and Treatment Act (CAPTA), (2004) reports that seven states further define medical neglect as failing to provide any special medical treatment or mental health care as needed by the child. Medical neglect is highly correlated with poverty; however, there is a distinction between a parent's inability to provide care based on a lack of financial resources, cultural, or religious norms and a parent's refusal or unwillingness to provide care. In 2005, National Data Archives of Child Abuse and Neglect (NDACAN) reported that 2% of children (i.e., 17,637) in the United States were victims of medical neglect (United States Department of Health and Human Services [USDHHS], 2007). This includes situations when a parent refuses medical care for a child in an emergency situation, acute illness, or refusal to follow through with medical recommendations for a child with a treatable chronic disease or

disability. Such disregard often results in frequent hospitalization and deterioration of the child's physical status (American Humane, 2009).

In addition to the general definition as offered by WHO, CAPTA United States Code Title 42, Chapter 67, a key Federal legislation addressing child abuse and neglect, set forth a minimum definition of child abuse and neglect and includes: "any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse, or exploitation, or an act or failure to act which presents an imminent risk of serious harm" (CAPTA, 2004).

The latest statistics on child maltreatment conducted by the United States Department of Human Services Administration on Children Youth and Families Children's Bureau reported an estimated 3.5 million investigations conducted by Child Protective Services (CPS) during 2007. More than three quarters of a million (i.e., 794,000) children were confirmed victims of maltreatment with a victimization rate of 10.6 per 1,000 children in the population (CPS, 2007). Nearly 65% of the 794,000 children were victims of neglect. Child neglect, more prevalent than physical, emotional, and sexual abuse of children, accounts for over half of the reports to CPS annually (Ludwig, 2006). Approximately 42% (i.e., 600-700) of the reported deaths annually are attributable to neglect (Berkowitz, 2001). Victimization tends to be evenly split among males and females (48.2% and 51.5% respectively), however young children tend to be targeted more often than older children. Infants and young children are at greatest risk (Butchart et al., 2006). Approximately 32% of victims of maltreatment were under the age of four years old; double the number reported for 5-14 year olds. Children younger

than one year old had the highest rate of victimization of 24.4 per 1,000 (Edleson, Mbilinyi, & Sudha, 2003; USDHHS, 2009). "Infant and pre-school children are at the greatest risk of fatal maltreatment as a result of their dependency, vulnerability, and relative social invisibility" (Butchart et al., 2006, p. 11).

A distinction between neglect and poverty must be made to dispel the myth that neglect is simply a condition associated with hardship. A finding of neglect is made when resources are available and not utilized. To further clarify this distinction, 11 States and the District of Columbia, have excluded the financial inability to provide for a child from the definition of neglect (Child Welfare Information Gateway, 2007).

In general, child neglect is not a single incident, but a process that occurs over time. It is a very complex, often insidious set of behaviors. While certain behaviors may not appear to be immediately and irrevocably detrimental to the child such as sending them to school without breakfast, allowing young children to walk a great distance to school unsupervised, or allowing a child to attend school in dirty, inappropriate clothing, the chronic quality of the inaction/inattention can be extremely harmful to their emotional, cognitive, and psychosocial development. In permitting a child to continually experience *avoidable present suffering,* the parent, through his/her inaction or inattentiveness increases the negative impact of the neglectful behavior.

The conduct associated with neglect has been shown to alter developmental outcomes in the child. The first few years in the life of a child are central to their social, cognitive, and developmental needs, especially during the neural synapse development (Glaser, 2000). Research indicates that children maltreated during the first three to four

years of life, an extremely sensitive developmental period, suffer from an increased rate of developmental disabilities when compared with children that did not experience neglect (Crittenden & Ainsworth, 1989). For example, it may be difficult for some children to form significant attachments with the providers of their care, or learn the subtle cues and behavioral suggestions necessary to develop long term, significant relationships. These lapses may interfere with the ability to engage in meaningful relationships in the future (Perry, 1996). At the core of child neglect is the lasting damage to the child's sense of self.

One of the first studies to include the category of neglect among those listed as child maltreatment reported evidence of learning disabilities, reduced self-esteem, and increase risk for juvenile delinquency among neglected children (Steele, 1986). Reidy (1977) found that both abused and neglected children behaved more aggressively in school than children without a history of neglect or abuse. Hoffman-Plotkin and Twentyman (1984) also found a greater incidence of aggression in abused and neglect children on the playground; however, they qualified their assessment in noting that neglected children interacted less with peers than abused children. Conversely, Crittenden and Ainsworth (1989) found that neglected kids tended to be more passive; predisposed towards helplessness under stress, demonstrating significant development delays when compared with abused children. Katz (1992) found language delays with both groups, and noted that delays for neglected kids were more severe and enduring. Taken to the extreme, severe emotional and physical neglect of an infant's need for stimulation and

nurturance may result in a non-organic failure to thrive syndrome and/or death (American Humane, 2009).

A majority of studies suggest a child's early years are the most critical for optimal development; providing the foundation for success in school and the community. Child neglect can have harsh, detrimental effects on a child's cognitive, psychosocial, emotional, and behavioral development (Perry, 1996). Furthermore, Hildyard and Wolfe (2002) revealed a tendency for children to internalize rather than externalize feelings leading to a reduced self-image, alcohol and substance abuse, depression, and suicidal ideation. These findings suggest the need to actively conduct research focused on prenatal and early postpartum assessment, identifying families at risk while developing focused intervention strategies with the intent of providing families with evidence-based prevention strategies and supportive guidance.

The aim is not to assign blame or suggest an investigative approach to the study of neglect. It is rather to a) provide an avenue to prevent the maltreatment of children and the perpetuation of violence within the family system, b) demonstrate the potential for life altering psychological, physical, cognitive and social outcomes for children who experience neglect, c) to ensure the safety of children through identification of risk factors, and d) provide support and viable community resource assistance to vulnerable families. Families who neglect their children are in need of formal, community based networks as many are socially isolated (DePanfilis, 1996; Geffner, Igelman, & Zellner, 2003; Wolak, & Finkelhor, 1998). In order to provide successful interventions for

neglectful families, risk factors among high risk populations must be identified and explored. This is also true of families that engage in the universal disciplinary tactic of psychological aggression.

Psychological Aggression: A Universal Disciplinary Tactic. Psychological aggression is the second category of family violence of interest in this study. Understudied and extremely prevalent, psychological aggression consists of several levels of behavior. Defined by Straus and Field (2003), psychological aggression is "a communication intended to cause the child to experience psychological pain. The communicative act may be active or passive, verbal, or non verbal" (p. 797). Evidence suggests the prevalence of psychological aggression ranges from 25%-94%, dependent on the measurements employed. The values of frequency, chronicity, and severity must be considered when exploring psychological aggression. As a form of emotional and psychological abuse, it signifies "a pattern of failure over time on the part of a parent or caregiver to provide a developmentally appropriate and supportive environment" (Butchart et al., 2006, p. 10). Specific acts of psychological aggression include a) shouting, yelling, and screaming, b) threatening to spank without carrying out the threat, c) name calling, and d) threatening to kick the child out of the home (Straus & Field, 2003).

In the past, research has proven challenging in this area due to the difficulties associated with operationalizing and measuring the variable. Straus and Field (2003) note the lack of empirical evidence regarding the prevalence and chronicity of psychological aggression; information necessary as a first step in defining the problem. It was believed

that previous researchers may have been influenced by earlier personal experience by considering psychological aggression a cultural norm until it became too severe or chronic. Straus and Field sought to determine more precise boundaries concerning the phenomenon of psychological aggression starting with the measurement of the prevalence and associated demographics. Using the Conflict Tactics Scale Parent Child (CTS-PC) (Straus, Hamby, Finklehor, Moore, & Runyan, 1998); five identified aspects of psychological aggression were measured. The results revealed an extremely elevated prevalence in the identified population. Forty-three percent of parents reported using psychological aggression towards an infant, peaking at 94% at age seven and declining to 90% as the child entered puberty and adolescence. Shouting, yelling, and screaming were the most frequent forms of psychological aggression reported followed by threatening (e.g., to spank or remove the child from the home). Straus and Field (2003) concluded that psychological aggression is a) used as a method of controlling and correcting behavior and b) an unacceptable mode of communication between parent and child. Previous research supports these findings by noting these deleterious effects of psychological aggression on the child's growth and development (Hart, 1987; Soloman & Serres, 1999).

It is not clear whether occasional usage of psychological aggression causes harm to the child, nor has the threshold for determining when psychological aggression becomes psychological abuse been empirically determined. However, chronic psychological aggression has been associated with delinquency and the development of mental health issues in the child (Straus & Field, 2003). Yet, psychological aggression is clearly not an

acceptable method of behavioral control. In modeling objectionable behavior to children, parents inadvertently reinforce offensive maladaptive, aggressive methods of controlling and correcting unwanted behavior, and may be instrumental in perpetuating violence as an acceptable form of communication between couples, parents, and children. Further research examining the prevalence of psychological aggression in specific populations, identifying risk factors in determining the role of psychological aggression plays in the perpetuation of family violence.

Maternal History of Abuse and Intergenerational Violence. A significant factor implicated in the etiology of child abuse and neglect is the parents' (in this case the mother's own) childhood history of abuse (Dixon, Brown, & Hamilton-Giachritsis, 2005). Of concern is the influence a mother's own previous traumatic history may have on her ability to parent her child. Several retrospective and prospective studies have found that experience of childhood abuse from parents or primary caregivers is significantly associated with the development of adult mental health and substance abuse problems for women (Downs, Capshew, & Rindels, 2006; Shuck & Widom, 2001) and may increase risk for early onset of mental health disorders (Banyard, Williams, & Siegel, 2001; Kessler& Magee, 1993). Zerk, Mertin, & Proeve (2009) postulate that "traumatized adults may be significantly less emotionally available to their young children because of their own impairments" (p. 430). The studies point to the potential for serious maladaptive effects of previous violence on a mother's cognitive, emotional, and psychological stability as well as her ability to attend to the tasks required to successfully parent a child.

Understandably, no single cause or profile has been identified that would trigger a parent to neglect their child, yet several risk factors have been identified. Goldman, Salus, Wolcott, & Kennedy (2003) categorized various risk factors into the four domains including: (1) parent or caregiver factors, (2) family factors, (3) child factors, and (4) environmental factors. Several *parental factors* may play a role in contributing to child neglect including: a) personal characteristics and psychological well-being, b) history of previous personal maltreatment, c) attitudes and knowledge, and d) age. It is well documented that parents who themselves have been traumatized by violence often feel helpless and frustrated in their own ability to keep their children safe from harm. They may be emotionally unavailable and unable to promote the growth and development of their children (Osofky, 1998). A parent's childhood history has the potential to play a significant role in how an individual parents her own child. Parents with a history of abuse as a child, or those whose needs were not met are at greater risk for not meeting the needs of their children and perpetuating violence in the family system (Osofky, 1998).

Though the percentages vary slightly, the literature reports that approximately one-third of all individuals maltreated as children will go on to harm their own children. (Kaufman & Zigler, 1987; 1993). These findings do not suggest that all maltreated children will perpetuate violent acts when they become parents (Mohler, Mathesis, Pouska, Marysho, Finke, Kaufmann et al., 2009). However, abusive and neglectful parents often have histories of abuse or deprivation in childhood and many grow up knowing hunger, loneliness, and neglect as the norm (Kempe et al., 1976), supporting previous childhood abuse as a risk factor for child neglect.

Impulsivity has also been cited as a potential risk factor in mothers with a history of abuse as a child. This assumption was supported in a study conducted by Mohler and colleagues (2009) who found mothers endorsing a history of abuse as a child were significantly more impulsive than those without an abusive history. Impulsivity is cited as an undesirable parental trait (Mohler et al., 2009). These findings highlight the need to intensify early prevention efforts in mothers with a history of abuse to reduce the tendency to react impulsively, thus perpetuating intergenerational violence.

The concept of intergenerational violence is often referred to in the literature (Browne & Herbert, 1997; Egeland, 1998). It is also commonly held that a parent with a history of maltreatment as a child is at risk for maltreating their own children (Kaufman & Zigler, 1989; 1993). Many parents report feeling frustrated and helpless in an attempt to keep their children safe. Others describe feeling emotionally numb and unavailable to others (Osofsky, 1998). Moehler, Biringen, & Poustka (2007), in a study looking at emotional availability of mothers with a history of abuse as a child, found abused mothers to be more intrusive towards their children than those without a history of abuse. Yet causal relationships are rarely direct when researching human behavior and are dependent on the presence of other risk factors (Starr & Wolfe, 1991). Parents with a history of maltreatment as a child are also more likely to have a child referred to CPS if the parent has a history of depression, anxiety, or some other form of mental illness. Other risk factors include a) young parental age, b) living in the home with at least one violent adult, c) poor parenting skills, d) isolation, and e) financial difficulties (Cicchetti, & Lynch, 1993; Dixon et al., 2005).

Child Maltreatment and the Role of Intimate Partner Violence. "Child maltreatment including child neglect and psychological aggression towards the child does not exist in isolation from other forms of family violence" (Kaufman- Kantor & Little, 2003, p. 338). Previous research including over 100 studies has linked various forms of family violence with one another including IPV, child abuse, neglect, and sibling violence in multifaceted ways (Appel & Holden, 1998; Cox, Kotch, & Everson, 2003; Dixon, Browne, & Hamilton-Giachritsis, 2009; Edleston, 1999b; English & Marshall, 1999). IPV in the family home has shown to be a significant risk factor for various forms of child abuse and neglect (Browne & Hamilton, 1999), with children placed as direct victims of separate incidents of maltreatment and/or involvement in the violence between intimate partners (Campbell & Lewandowski, 1997). Edelson (1999b) in his review of the literature reported a co-occurrence rate of between 30% and 60% for the 31 studies reviewed. High rates of overlap were found in a) child fatality reviews (41-43%), b) abused and neglected child studies, and c) battered mother studies. Straus and Smith (1990) reported that child maltreatment is 18 times more likely to occur in homes where violence between intimate partners is present. The literature supports the assertion that violence often begets violence.

IPV is synonymous with the terms domestic abuse, domestic violence, spousal abuse, battering, courtship violence, forced sex, marital rape, and date rape. The term *intimate partner* refers to current or former spouses, common-law spouse, cohabitating partner, current or former dating partner, or significant other and includes both heterosexual and homosexual partners (Tjaden & Thoennes, 2000a). IPV can be defined

as a pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control other another intimate partner. It is the threatened or actual use of physical force that results in or has the potential to result in death, injury or harm (Saltzman, Fanslow, McMahon, & Shelley, 2002). IPV includes an actual or threatened physical, psychological, sexual, or stalking violence by a current or former intimate partner of the same or opposite sex and cuts across all social and economic categories.

Similar to other forms of hostility and brutality, violence between intimate partners is not a new phenomenon associated with a specific event or time period, nor is it confined to a specific geographical, economic, social, or cultural subgroup or region. IPV is an ancient behavioral practice. The incidence of intimate partner violence has remained pervasive and persistent throughout recorded history despite global attention and implementation of laws condemning violence within the family. An example of the ancient nature of this phenomenon can be observed in a report produced by a team of paleopathologists from the Medical College of Virginia. The scientists identified massive skull fractures among mummies identified as over 2000-3000 years old. The significance of this discovery included the finding that up to 50% of these fractures, primarily located on the skull, were found on the skulls of women as compared with 9-20% discovered on the skulls of men (Dickstein, 1988). It is believed that these fractures were sustained as a result of peace time personal violence.

Studies have shown that up to 30% of women in the United States have suffered violence from an intimate partner at some time during their lives (Tjaden & Thoennes, 2000). Family violence in general is a multifaceted, extremely complex phenomenon.

The relationship between child maltreatment, specifically neglect, and intimate partner violence has been clearly established (Straus, Gelles, & Seinmetz, 1980). Understanding the dynamics of IPV offers valuable background information necessary to determine other risk factors associated with the perpetration of violence within the family system.

Describing Intimate Partner Violence. IPV exists along a continuum from a single episode of violence to ongoing battering. It includes the willful intimidation, physical assault, battery, sexual assault, and/or other abusive behavior perpetrated by an intimate partner against another (Saltzman, Fanslow, McMahon, & Shelley, 2002). It starts with emotionally abusive and controlling behavior, and often escalates to psychological and physical trauma as well as death. It includes any behaviors that intimidate, manipulate, humiliate, isolate, frighten, terrorize, coerce, threaten, blame, hurt, injure, or wound. Though victims may be male or female, 85% of IPV victims are women (Rennison, 2003). It remains the single largest cause of injury to women between the ages of 15-44 (United States Department of Justice: Bureau of Statistics, 2007), exceeding rape, mugging, and car accidents combined. In the United States, 1.3 million women are physically and sexually assaulted each year (CDC, 2003). Women experience about 4.8 million IPV related physical assaults and rapes annually (CDC, 2003). In 2004, IPV resulted in 1,544 deaths. 75% of these deaths were female (National Coalition Against Domestic Violence [NCADV] Fact Sheet). The literature reports that as many as one in three women will be assaulted by a male partner sometime in their adult lives (Strauss, Gelles, & Steinmetz, 1980). The cost of IPV is staggering, exceeding 5.4 billion dollars each year including direct medical and mental health care (CDC, 2003).

More Than Marital Violence to the Extreme. Hamilton (2006), concerned about the complacency intrinsic in discussions about IPV, insisted that IPV is not just marital conflict to the extreme. IPV is violence out of proportion to any precipitating incident. All human action occurs in the context of a relationship (Hamilton, 2006). The process of successfully living with an intimate partner implies the ability to resolve disputes in a reasonable, non-violent, adaptive manner (Hampton & Gerard, 2006). Perpetrators of abuse do not settle disagreements or differing opinions amicably, possibly out of a sense of loss of control, shame, anger, a need for power and control, or an attempt to achieve a faulty sense of justice. Instead, the intent is to harm the other, usually by targeting their partner's vulnerability. This method of *dealing* with ambiguity is generally ongoing and can escalate over time (Hampton et al., 2006). These learned behaviors when witnessed by young, impressionable children within the household are internalized, promoting the continuation of maladaptive communication and conflict resolution strategies.

A Complex and Underreported Phenomenon. Intimate partner violence involves a dynamic set of variables that are difficult to capture and contain due in part to the inability to accurately measure its incidence and prevalence (Summer & Hoffman, 2002). Several factors contribute to this declaration such as a) the lack of standardized definitions and measures, b) the biased populations studied, (woman and children in shelters), c) the location of the violence (IPV occurs primarily in the privacy of the home), d) fear of retaliation by the perpetrator, e) reluctance to report victimization, f) the resulting anger, shame, blame, and guilt associated with the violent act, g) the

phenomenon of learned helplessness, and h) the irrational hope that things will magically change and get better.

Women are often viewed as the primary targets of IPV due to the high rate of injury and utilization of violence for self-defensive purposes (Saunders, 2002). However, multiple research studies have documented rates for partner violence to be almost equal between men and women (Archer, 2000; 2002). The difference lies in the fact that women are generally injured more often; though men constitute approximately 30% of the reported injuries. It is important to remember these data as the tendency for many in the healthcare profession is to equate the victim of IPV with women only. However, while the statistics clearly indicate a bi-directional pattern of perpetration, in the context of this study, the identified victims are women and either directly or indirectly, children.

Most researchers in the field of family violence would agree that IPV is an underreported occurrence, especially current IPV (Slogin et al., 2009). This is concerning as women experiencing current IPV are at greatest risk. There are many potential contributing factors for this discrepancy. Women involved in a violent relationship are often reluctant to admit to the violence due to feelings of shame, guilt, fear of retaliation, betrayal, as well as a belief that people will not understand why they choose stay with the perpetrator (McCauley, Yurk, Jenckes, & Ford, 1998). Women in violent relationships often experience a great deal of emotional trauma and find it difficult to think independently from their significant other. This is a major challenge for researchers. Women will often not admit to violent relationships out of fear, while others do not offer a positive response to the questions/prompts, as their focus is survival within

a dysfunctional home environment. Some women do not recognize the often subtle forms of control and coercion found within their relationships as abusive. These factors continue to challenge outreach organizations, healthcare providers, law enforcement officials, researchers, and others providing safety, support and services to families in need. Though violence in the home has been declared a public health crisis, many factors continue to conspire to keep much of the violence hidden. This is why research in this area continues to be so vital in the drive to identify and heal these families. A few pioneers in the area of violence in the home paved the way for researchers to continue to seek out information and solutions to the monumental problem of violence. Through these landmark studies, a great deal of insight has been gained, yet the work is not complete. In order to continue to move forward, these studies must be reviewed and critically analyzed as they have served as benchmarks for numerous other studies.

Review of Key Landmark Studies. Multiple studies have been conducted with the primary aim of identifying and describing family violence. Two of the most cited studies include the National Family Violence Surveys (Straus & Gelles, 1985), and the National Violence Against Women Survey (NVAWS), (Tjaden & Thoennes, 1998). These sentinel reports provided researchers with findings based on self-reports of large, randomized samples of American families and of individuals living in American households on topics seldom discussed such as violence in the home. These studies allowed researchers to move beyond an individual model and explore potential social causative factors in addition to trending the data. The results of these studies often serve as benchmarks for subsequent studies.

National Family Violence Surveys (NFVS). At the time, the NFVS were identified as "the only nationally representative studies of family violence" (Straus & Gelles, 1989, p. 3). Previous studies were based on insufficient numbers of participants and utilized samples in special populations in contrast to the 8,145 individuals who participated in these studies. In addition to ensuring a representative sample, these studies used an instrument known as the Conflict Tactics Scales (CTS, CTS2) designed to measure a multitude of behaviors used in conflicts between family members. The CTS is one of the most widely used instruments to measure physical violence. These studies centered on a theoretical perspective and focused on the characteristics of society as a primary causal factor of violence. Finally, these studies chose to include the perspective and experiences of the victims and the perpetrators as well as collecting data on child abuse and spousal abuse. Some of the findings did not support conclusions drawn by previous studies; encouraging a great deal of discussion and debate. The instrument itself was also called into question, causing significant controversy. The study attempted to address the 99% of men and women that choose not to file a police report or move into a shelter, identifying them as people also in need of supportive services. It also allowed the researchers to make estimates on the number of family members experiencing violence in their own home. These numbers continue to remain elevated and unacceptable.

The National Violence Against Women Study (NVAWS). The NVAWS, (Tjaden & Thoennes, 1998) was one of the first studies to explore the relationship between various types of violence against women including childhood victimization and subsequent adult victimization (rape, stalking, and intimate partner violence). The survey collected data

on men and women. It was issued jointly by the National Institute of Justice and the Centers for Disease Control and Prevention. The aim was to a) provide data on the prevalence and incidence of rape, physical assault, and stalking; b) determine the prevalence of male-to-female and female-to-male IPV, c) determine the prevalence of rape and physical assault among women of different racial and ethnic backgrounds, d) describe the rate of injury among rape and physical assault victims, and e) determine the frequency of the victims use of medical services (Tjaden & Thoennes, 2000). Key findings included

- 51.9% of women and 66.4% of men said they were physically assaulted as a child by a parent or caretaker;
- there is a positive relationship between victimization as a minor and subsequent victimization as an adult;
- women experience more IPV (22.1%), than men (7.4%);
- violence against women is primarily IPV (64%) compared with men (16.2%);
- women are more likely than men to be injured during an assault (31.5% versus 16.1% respectively); and
- the risk of injury increases if the perpetrator is a former intimate partner.

The findings supported previous studies that found violence against women is primarily perpetrated by an intimate partner and is classified as a significant public health and criminal justice concern. The results also revealed a pattern of intergenerational violence

as demonstrated by a correlation between victimization prior to a young woman's 18th birthday, and victimization as an adult.

United States Department of Justice. Another source of invaluable data focused on the incidence and prevalence of IPV include the annual statistics reported by the United States Department of Justice (USDOJ, nd.). The data are collected throughout the year by identified publically reporting agencies and compiled by the USDOJ. The USDOJ is one of the largest agencies that report national statistics on violence, including IPV. The data gathered and produced by this governmental organization offers timely data and valuable insights into interpersonal violence using large, representative samples.

Outcomes Associated with Intimate Partner Violence. Outcomes associated with partner violence occur along a continuum from a reduction in self-esteem as a result of emotional violence to death. The consequences are numerous and affect a woman/mother in significant ways. Regardless of the category of abuse, victimization changes the way a woman interacts with her partner, her children, family members, friends, and the community (Cummings &Davies, 1994; Evans, Davies, & DiLillo, 2008; Wolak & Finkelhor, 1998). It is often concluded that family violence affects more than the victim; it affects the entire family system. Certainly, the relationship between violence and untoward outcomes is significantly more complex than a simple causal relationship portrays. The transformation that occurs with many women affects their most vital relationships: the relationship between mother and child. Reviewing the outcomes associated with IPV is instructive, emphasizing the detrimental quality of victimization.

Physical Health Consequences. The consequences of family violence are significant, leaving individuals damaged, shamed, and isolated. The physical health of those affected by IPV range from minor scratches and bruises (Tjaden & Thoennes, 2000) to more severe physical outcomes (depending on the severity and frequency of abuse) such as knife wounds, broken bones, gynecological disorders, pregnancy difficulties, development of chronic conditions such as gastrointestinal, circulatory and central nervous system disorders, and death (Campbell, Jones, Dienemann, Kub, Schollenberger, O'Campo, et.al., 2002; Heise & Garcia-Moreno, 2002; Plichta, 2004; Tjaden & Thoennes, 2000). Higher incidents of stress related disorders such as irritable bowel syndrome (Campbell & Lewandowski, 1997) have also been reported. The death rate due to IPV is noteworthy: 329 males and 1,181 females were murdered by an intimate partner in 2005 (Bureau of Justice Statistics, 2007). Complacency is not an option when the consequences of family violence are potentially so grave.

Psychological and Emotional Consequences. The psychological consequences of IPV are not as apparent as the physical manifestations that often accompany physical abuse (Campbell, 2002; McCauley et al., 1998; Sato-DiLorenzo & Sharps, 2007; Tjaden & Thoennes, 2000). Bergen (1996) and Roberts, Klein & Fisher, (2003) note that any type of intimate partner violence whether psychological, emotional, physical, or sexual can lead to psychological consequences. Abused women may exhibit a multitude of measurable psychological effects of varying severity and type. Reduced self esteem, feelings of rejection, shame, abandonment, guilt, anger, fear, and inability to trust are emotions/behaviors often observed in this population (Campbell & Lewandowski, 1997).

Other typical psychological outcomes include nightmares, increased health concerns, increased startle response, numbing and avoidance (all correlated with symptoms of posttraumatic stress disorder), irritability, cognitive confusion, problems with memory, and difficulty with intimacy. Clinical labels used to describe specific subsets of symptomatology include Posttraumatic Stress Disorder (PTSD), depression, anxiety, dissociative disorders, and antisocial behavior (Campbell & Lewandowski, 1997) with depression cited as the most common outcome.

Social Outcomes. One of the first and most common social outcomes observed is the separation from social networks, or straining relationships with friends, family members, and employers (Heise & Garcia-Moreno, 2002). This imposed isolation removes the individual from their social support system (Plichta, 2004). Other significant effects may include a restricted access to health care services due to feelings of shame, fear, loyalty, or lack of financial autonomy. Isolation due to IPV has been linked to child abuse and neglect (Cox, Kotch, & Everson, 2003).

Increased Health Risk Behaviors. Finally, it is well documented that women with a history of intimate partner violence are at risk for engaging in negative health risk behaviors (Heise & Garcia-Moreno, 2002; Plichta, 2004; Roberts, Auinger, & Klein 2005). Research validates that the more frequent and severe the violence, the stronger its relationship to negative health behaviors as the effects of violence are cumulative (Straus et al., 2006). Negative health risk behaviors include a) substance abuse, b) unprotected sex, c) multiple sex partners, d) trading sex for food, money or drugs, e) smoking, f) over eating, g) anorexia/bulimia, h) early sexual activity, and i) suicidal ideation and attempts

(CDC, 2002). Engaging in these behaviors places the victim at greater risk for the development of chronic health care issues and the potential overuse of healthcare services (Campbell & Lewandowski, 1997). These behaviors are not conducive to adaptive, consistent child rearing practices leaving the child vulnerable to neglect and abuse.

Maternal Depression and Intimate Partner Violence. As noted previously, one of the most common and debilitating psychiatric outcomes of IPV is depression (Campbell, 2002). This is not surprising as depression is the most frequently observed psychiatric disorder in adults (Goodman & Gotlieb, 2002). Symptomatology associated with maternal depression may include a) change in appetite or weight; 5% change in less than 30 days, b) change in sleep patterns, c) feelings of hopelessness or helplessness, d) loss in interest in activities that previously provided enjoyment, e) psychomotor retardation or agitation, f) feelings of worthlessness or guilt and g) inability to focus or concentrate (APA, 2000). In the general population, depression rates are higher in women than men; one in ten women versus one in twenty men (APA, 2000). Unfortunately, most adults with depression do not seek treatment (Kessler, Merikangas, & Wang, 2007). Kessler et al., (2007) revealed that less than one third of adults with major depression or dysthymia take advantage of mental health services, though one third of those seeking care do so through a wide range of alternative points of contact. Yet, it is estimated that 80% of individuals that have experienced one episode of major depression will experience more than one episode and 50% will relapse within two years of recovery (Golding, 1999; Goodman & Gotlieb, 2000). The relapse rates are quite high and have the potential to significantly alter the individual's ability to develop and maintain

relationships. Depressive symptoms and the associated behaviors have a negative impact on relationships, work performance, and general activities of daily living (Goodman & Gotlieb, 2000). Depression also increases the risk of suicide, resulting in a 15% mortality rate (APA, 2000), as well as the potential for homicide (Campbell, Webster, Koziol-McLain, Block, Campbell, Curry et al., 2003).

Maternal depressive symptomatology is a risk factor for socio-emotional and cognitive development of children (Cummings et al., 1994). In general women of childbearing age are at increased risk for depression especially during pregnancy and in the weeks and months following delivery. A mother with depressive symptoms may have trouble responding to her baby in a loving, caring fashion, making secure attachment between mother and child difficult. Attachment forms when the mother responds to her baby in a consistently warm and sensitive manner. It makes the baby feel safe and secure and forms the initial components of trust. However, maternal depression may have negative consequences on the child's ability to develop a secure attachment with his/her mother (Goodman & Gotlieb, 2002).

The prevalence of depression among women in violent intimate relationships is higher than noted in the general population ranging from 22%-61% (Dienemann, Boyle, Baker, Resnick, Widerhorn & Campbell, 2000; Tjaden & Thoennes, 2000b). In a study of women diagnosed with depression, 61% reported having experienced IPV in their lifetimes (Dienemann, et al., 2000); more than twice the rate found by Tjaden and Thoennes (2000) during the NVAWS study. Though depression is not often a single occurrence, women victimized by IPV often show a decrease in depressive

symptomatology when the violence subsides (Campbell & Soeken, 1999); providing insight into the correlation between active IPV and depression in women who are abused.

All forms of violence between intimate partners, be it psychological, physical, and sexual are associated with the development of depressive symptomatology. However, psychological abuse has been shown to have the greatest negative impact on mental health outcomes (Pico-Alfonso, Garcia-Linares, Celda-Navarro, Blasco-Ros, Echeburua, & Martinez, 2006) and is a stronger predictor of depression than physical IPV. Similarly, Kendall-Tackette (2002) found an increase in depressive symptomatology among women with a history of abuse/trauma in their lifetime; supporting Scaer's (2008) contention that traumatic stress has a cumulative effect on the individual.

Violence and Depression During Childbearing Years. Young adulthood is often a time of great psychological growth and distress for women (Lee, 1999). The mental health of women is significantly vulnerable during this time period. In many instances, it is also a time when violence between intimates begins or intensifies, particularly during pregnancy (Nonacs, 2005). Violence perpetrated before pregnancy is predictive of later violence. The highest rates of IPV are found among women during the child bearing years (Tjaden & Thoennes, 1998). The prevalence of IPV among pregnant women is 5.2% (Saltzman, Johnson, Gilbert, & Goodwin, 2003); greater than gestational diabetes (2%-3%) and almost as prevalent as pre-eclampsia. Furthermore, women who experience violence during pregnancy are at greater risk for life threatening violent acts than are non-childbearing women (O'Campo, Gielen, Faden, Xue, Kass, & Wang, 1995). Women between the ages of 20-24 years are the most likely to report violence, though one third

of victimized women never disclose the experience of IPV to anyone (Coker et al., 2002). The prevalence of IPV within this population becomes increasingly significant when one considers the potential outcomes associated with IPV including maternal depression and child maltreatment.

Young women may not only be victims within intimate partnerships, but may act as perpetrators as well. Similar to young women victimized by IPV, those that act as perpetrators are also prone to depression after becoming a mother. This places girls and young women at great risk for physical and mental health sequelae when engaged in a violent intimate relationship, especially if left untreated. Csoboth, Birkas, and Purebi (2005) reported a) direct lifetime experience of abuse is associated with severe depressive symptomology, and b) so too is the threat and fear of abuse is also associated with severe depressive symptoms. These findings suggest that the experience of abuse often persists over time and has the potential for serious long term psychiatric morbidity including depression, PTSD, anxiety disorders, personality, and substance abuse disorders. These findings are concerning as a substantial number of young women in violent intimate relationships are also mothers, indicating that a large number of children may be repeatedly exposed to violence and maternal depression (Milan, Lewis, Ethier, Kershaw, & Ickovics, 2005).

Depression and Parental Stress. Parental behavior and personality influence a child's developmental progress as it relates to cognitive, social, biological, and psychological development (Radke-Yarrow, 1998). Additional factors including inherited temperamental biases, ordinal birth position, socio-economic status (Peterson, & Albers,

2001), ethnicity, education, peer interaction, political climate, and historical era also influence a child's development. Many important, enduring lessons in life begin in the family home. It is where a child learns to trust, communicate and listen. A parent's role is to nurture, teach and provide for his or her children. However, emotional, psychological, social, biological, and financial stressors may adversely impact a parent's attentiveness and sensitivity toward his or her children, creating parental stress in addition to a home environment already filled with stress, uncertainty and in some households, violence. The importance of including parental stress in the list of maternal risk factors includes the understanding of the role parental stress plays in the growth and development of children. An assessment of parental stress promotes early identification of a dysfunctional parent-child system and provides an avenue to explore family functioning and parenting skills. Exploring parental stress also provides an assessment of child abuse risk (Abidin, 1995).

The role of parental stress as a potential antecedent of child maltreatment has been explored in the literature (Egeland, Breitenbucher, & Rosenberg, 1980; Whipple, & Webster-Stranton, 1991). It has been defined as a function of the interaction of the subjectively defined demands of parenthood and the capacity of the individual to respond to those demands related specifically to parenting (Straus, Gelles, & Steinmetz, 1980). Parental stress is an established risk factor for maladaptive parental/child outcomes. Parents who maltreated their children report higher stress levels than parents that deny maltreatment (Justice, Calvert, & Justice, 1985). Parental stress is often manifested in the context of intense parent-child conflict in addition to highlighting a variety of alternative sources of parenting stress (Greenwald, 1989). A common source of stress for parents

includes difficult child characteristics as manifested by the child's health/behavioral health status. In abusive families the source of stress likely arises from parental characteristics as seen by maternal psychopathology and adverse environments such as in families with financial/health struggles and violence (Mash, & Johnston, 1990).

Depression and anxiety are closely associated with stress (Baxter, Cummins, & Yiolitis, 2000; Folkman & Lazarus, 1988; Whipple & Webster-Stranton, 1991). Depressed parents may be more likely than non-depressed parents to experience stressors (Hammen, 2002). Hammen also noted that depressed women showed significantly more episodic stress than did non-depressed women. Goodyer, Cooper, Vize, and Ashby (1993) found that mothers with history of depression or any other psychopathology, such as anxiety, reported higher rates of stressful events than mothers without a diagnosis of depression. Maternal depression, therefore, may play a role in the frequency and intensity of parental stress; limiting a mother's problem solving ability within the home setting.

The function of stress and in particular, parenting stress within the family system is fundamental when determining risk factors for child neglect. Lazarus (1966) defines stress as "stress occurs when an individual perceives that the demands of an external situation are beyond his or her perceived ability to cope with them" (p. 32). Lazarus formulates a transactional model in his definition of stress, incorporating the idea that the appraisal of the stressor is more important than the stressor itself as it determines if the demand is in fact a stressor. A mother's perception of the stressor, therefore, is significant when assessing the presence, magnitude and chronicity of parental stress.

Signs may include feelings of anger, frustration, tension, anxiousness, aggression, fatigue, headaches, stomach upsets, backaches, skin rashes, recurrent viral illness, difficulty making decisions, poor concentration, and forgetfulness. McGuffin, Katz and Bebbington (1988) suggest that a tendency to experience stressful life events itself may run in families. Hammen (2002) also notes that "parental depression may expose and model for the child poor coping responses to life demands" (p. 190). As an institution, parenthood entails a significant amount of sustained stress. Parents in general, exhibit a higher level of stress and depression than adults without children (Evenson, 2009). The relatively high levels of chronic and episodic stress in depressed parents and their children, suggest a process of intergenerational transmission of dysfunctional interpersonal skills (Hammen, 2002).

Children as Victims of Intimate Partner Violence. Women are not the sole victims of IPV. Approximately half of all victimized women live in a home with children under the age of 12 (United States Department of Justice [USDOJ], nd.). USDOJ reports that an estimated 3.3 million children are exposed to violence against their mother each year (APA, 1996). Campbell (2002) notes that children living where IPV is present are at increased risk of becoming victims of abuse and neglect themselves. Straus and Smith (1990) report that child abuse is 18 times more likely to occur in homes where there is violence between the parents. There is emerging evidence that suggests that the negative effects of IPV on mother's mental health may mediate emotional and behavioral responses in children (Scheeringa & Zeanah, 2001; Zerk, Mertin, & Proeve, 2009).

The overlap between IPV and child maltreatment is well documented (Appel & Holden, 1998; Cox, Kotch, & Everson, 2003), although a great deal of the research has focused on children witnessing IPV against their mothers, rather than co-occurrence of the victimization of women and children. For example, children often become injured during violent episodes between their parents as they may attempt to intervene to protect their mother. In addition, the literature suggests that up to 70% of men who abuse their partners, also abuse children in the household (Appel & Holden, 1998). Parkinson, Adams, and Emerling (2001) found that children of abused mothers are 57 time more likely to be harmed as a result of intimate partner violence between parents when compared with children of non-abused mothers; suggesting a child of an abused mother is at great personal risk for abuse. In addition, children exposed to violence are more likely to engage in negative health risk behaviors, including violence as they age (CDC, 2009). The American Psychological Association (1996) notes: "Violence in the home may well be one of the primary learning grounds for later violence in other social settings and in other interpersonal relationships" (p. v). The relationship between IPV and child maltreatment is strong and in need of continued exploration and exposure; expecially when considering the untoward outcomes associated with intergenerational violence.

Transmission of Traits: The Role of the Parent. It is universally held that parenting plays a critical role in the development of children within the family system (Belsky, 1984). Indeed, parenting and parenting behaviors in high risk families seem to play an even more vital role (Davies & Cummings, 1994). What is alarming is the learning that takes place as a result of violence in the home (Straus, 1992; Vissing,

Straus, & Gelles, 1991). It is the place individuals first experience violence and the "first place they learn about the emotional and moral meaning of violence" (p. 102). The family is often considered the training ground for violence. Children and their parents are highly correlated on measures of aggression; possibly due to the transmission of traits from parents to children through socialization (Bjorkquist, 1997; Huesmann, 1988).

This point of view is corroborated by social learning theorist Bandura (1973) who speculated that the transmission of traits among family members may occur as a result of a combination of modeling and behavioral reinforcement both directly and indirectly by parents. In addition, NDACAN (2004) has consistently reported mothers as the identified perpetrator of violence towards children nearly 39% of the time (fathers 17.8% and both parents 16.8%). Early intervention is currently the best hope these families have to disengage from the maladaptive patterns that have been established within the family system. Therefore, a population of great interest to this researcher, includes new mothers. The question then becomes: To what extent does the mother's own level of distress and possibly diminished coping abilities as a result of multiple factors such as previous childhood abuse and later IPV, influence the way they perceive and care for their children?

The impact IPV has on women, children and families is considerable (Hampton, 2006). The trauma associated with a violent, intimate relationship has been identified as extremely detrimental to the physical and mental health of individuals and is often associated with poor outcomes for the victim and the victim's offspring (Hampton, 2006). This includes direct and indirect violence experienced by a child including adverse

affects as a result of witnessing violence. (Kitzmann, Gaylord, Holt, & Kenny, 2003; Margolin & Gordis, 2000). While there are many factors that impact a child's development, it is generally accepted that the mother plays a significant role in the growth and development of her children. Several studies have reported the presence of depression among women experiencing IPV and yet there remains a great deal to learn about the effect a mother's depression and perceived stress have on her ability to parent (Kitzmann et.al, 2003; Margolin, et.al., 2000). Previous studies indicate that IPV and subsequent maternal depression may negatively affect the mother child dyad as symptoms of maternal depression are not conducive to attentive, supportive parental responses. Researchers have consistently found associations between maternal depression and adverse child outcomes (Downey & Coyne, 1990; Goodman & Gotlieb, 1999), including child abuse and neglect. The dynamics associated with IPV and subsequent maternal depression have the potential to have immense impact on a child's growth and development and continue to be a topic worthy of further study and exploration.

Intimate Partner Violence and Child Neglect: A Failure to Protect

Clearly, the literature demonstrates a considerable overlap between IPV and child maltreatment. In addition to the co-occurrence of child maltreatment in violent homes, the exposure of children to violence has been the focus of recent interest. Hearing the voices of parents name calling, demeaning, threatening, disrespecting, and intimidating one another is difficult for a child to process. Feeling the tension in the home, visualizing the aftermath of an argument and being asked to *keep tabs* (on parents) and *take sides* can led to serious negative outcomes for children (Wolak & Finkelhor, 1998). The possibility

of physical harm or even death is increased for a child living in a violent home. Yet being forced to watch or worse yet, participate in the physical, emotional, and sexual assault of their mother has tremendous implications (Silverstein, Augustyn, Cabral, & Zuckerman, 2006). Children exposed to IPV often suffer psychological and behavioral difficulties. If left untreated these traumatic experiences have the potential to seriously impact their lives and may ultimately result in perpetuating an intergenerational cycle of violence (Report to National Institute of Justice, 2001). Yet, as Straus and Field (2003) note, there is no agreement on what comprises a threshold of dangerousness in children's exposure to IPV. Indeed, there appears to be scant empirical evidence addressing the identification of exposure to violence as a form of neglect. A few states (California, Oregon, and Minnesota), have designated the failure to protect a child from exposure to IPV as a form of child maltreatment under the law (Edelson, 2006). This legislation is the beginning of a change in the public's perception of the potentially harmful outcomes associated with a child's exposure to IPV.

Millions of children are exposed to domestic violence each year, though the severity, frequency, and chronicity may vary widely. A recent meta-analysis (Evans, Davies, & DiLillo, 2008) found that children exposed to domestic violence exhibit a significant increase in aggressive and anti-social behaviors, as well as more fear and inhibited performance based difficulties, lower social competence, and reduced academic performance. In addition, Kitzmann et al. (2003) found that children exposed to IPV scored lower on emotional health measures than children who were physically abused.

Another significant concern and reported effect of repeated exposure to family violence is the child's increased use of violence as a communication and conflict resolution technique with peers and other family members. Bandura (1975), in his explanation of social learning theory, might propose that children exposed to violence may in turn learn to use violence, perpetuating the continuation of intergenerational violence. Singer, Miller, Slovak, & Frierson (1998) found that recent exposure to IPV was significantly associated with a child's violent behavior in the community. Similarly, children's exposure to IPV may produce attitudes excusing/justifying their own later use of violence (Jaffe, Wilson, & Wolfe, 1986). Each of these studies report the presence and perpetuation of violence in the home while at the same time, providing an excuse for adolescents to act out their frustrations and fears using violence and violent behaviors as an expression of their inner turmoil. Spaccarelli, Coatsworth, and Bowden (1995) found boys incarcerated for violence with a history of domestic violence exposure felt the use of violence enhanced their image and reputation; reinforcing the image of violence as desirable, enhancing their image and reputation among peers.

Identification of a Conceptual Framework

Family violence is a multifaceted issue. The literature is conflicted in its commitment to a specific conceptual framework to inform studies in the area of family violence. Mental health practitioners tend to pathologize the dynamics, behaviors, and description of intimate partner violence, while community based advocacy groups see behaviors associated with the trauma of violence as adaptive, rather than pathological (Warshaw, Gugenheim, Moroney, & Barnes, (2003). Due to the extremely complex

nature of relational violence, the decision to integrate two dramatic models: Lazarus' Appraisal Theory of Psychological Stress and Emotion (Lazarus, 1999) and Scaer's Construct of Traumatic Spectrum (Scaer, 2005); a meta-theoretical systems outlook to describe the interactive properties of the mind, emotions and actions/adaptations were chosen as a conceptual framework for this study.

Lazarus' Appraisal Theory of Psychological Stress and Emotion. Stress is neither inherently positive nor negative. It is the perception of one's ability to cope or adapt to the identified stressor that is of interest (Lazarus, 1999). One method of examining a stressful person-environment relationship is to examine the relative balance of forces between environmental demands and the individual's psychological resources for dealing with them. "If the environmental load exceeds the person's resources (depending on personal vulnerability or resistance to their stressful consequences), a stressful relationship exists" (Lazarus, 1999, p. 58). Hence, stress can become exceedingly challenging when the individual must struggle with demands that cannot be easily met. Anxiety (a stress emotion) is likely to occur when a person has a poor regard for his own capacity to cope with the situation and the world effectively (self-efficacy). Lazarus expands this exemplar in noting that psychological stress is interactional, transactional, and individual. He proposes viewing stress as a relational interactive process, rather than stimulus-response based. A relational approach implies interplay between two sets of variables; those in the immediate environment and those within the person. It also entails the meaning a person constructs from the environment. Lazarus uses the term *relational meaning* to express this abstraction and the verb *appraising to*

describe the evaluative process by which the relational meaning is constructed. With physiologic stress, the body strives, through automatic processes to maintain or restore internal equilibrium. With psychological stress, however, another layer is added to the equation; the mind's desire to appraise the noxious stimulus that presents a harm, challenge, or threat to the individual. This evaluation or ongoing subject appraisal is where individual differences become significant as the mind struggles to cope with stress.

The basic tenant of a relational approach is the idea that stress and emotion express a particular kind of relationship between the person and the environment. For a relationship to be stressful, certain conditions must be met. When put in the context of intimate partner violence, the focus turns toward the interactive appraisal, rather than a cause and effect relationship. The person must desire something from the environment that is important to their personal desired goals and expectations.

Lazarus points out that people differ greatly in their goals and beliefs about self and the world; an important distinction in this theory. He identifies four essential environmental variables that influence stress and emotion: a) demands, b) constraints, c) opportunities, and d) culture. In addition to the environmental variables, three personal variables have been identified that interact with the environmental variables and are particularly important in shaping appraisal: a) goals and goal hierarchies, b) beliefs about self and the world, and c) the appraisal of what is happening from an individual perspective. It is the interaction and integration of personal variables with the person-environmental variables that comprise the construct of relational meaning.

Relational meaning, centered on the personal significance of that relationship, categorizes appraising as primary or secondary. With primary appraising, the individual initially evaluates whether or not *the event* is relevant to one's goals, commitments, or beliefs about him/her self and the world and asks: "Are any of my core beliefs or goals in question or threatened?" In answering yes to any of these questions, one would define the event as a condition of stress. In a condition of stress, the transactional alternatives are then categorized as a) harm/loss, b) threat, or c) challenge.

Secondary appraising refers to a cognitive-evaluating process that is focused on what can be done about a stressful personal environment relationship, especially when there has been a primary appraisal of harm, threat, or challenge. Once the appraisal is complete, an evaluation of coping options is conducted. The more confident the individual is about their capacity to overcome obstacles and dangers, the more likely they are to feel challenged rather than threatened. If an individual experiences a sense of inadequacy, the individual is more likely to experience the stressful content as a threat. However, with a traumatic occurrence such as IPV, or ongoing event, the ratio of demand versus resources becomes too great; overwhelming the individual's ability to adapt and restore. The individual feels helpless to deal with the demands for which he or she is exposed, resulting in panic, hopelessness, and depression.

For many women engaged in a violent intimate relationship the threat, harm, or loss imposes an overwhelming demand on women's resources. Environmental variables moderate the effect of the content variables and influence appraisal. From a relationship view of stress, in any transaction, both the environmental circumstances and personal

variables combine in determining whether there will be threat or challenge appraisal. The essence of trauma is the belief that crucial meanings have been undermined. These meanings encompass feelings of a) unworthiness, b) the belief that one is not loved or cared about, and c) the belief that they are no longer about to manifest any control over their lives. The fundamental meanings that once sustained a traumatized person are more than challenged. These meanings have been severely damaged and in some cases destroyed by the traumatic event(s). Anxiety, depression and potentially violence are often the resulting outcomes.

Scaer's Construct of Traumatic Spectrum. Scaer's (2005) work on traumatic stress integrates Lazarus' view of the brain-mind-body continuum as a way of explaining the effect that emotions have on the body, while expanding the definition of trauma. His broadened definition includes the recent innovations in the field of traumatic stress by conceptualizing the concept of trauma as "a continuum of variable negative life events occurring over a life span" (Scaer, 2005, p. 6). IPV is included in this expanded definition. What is unique in this developing model is Scaer's contention that within this continuum of variable negative life events are "those little traumas that may be accepted as normal in the context of our daily experience because they are endorsed or perpetuated by our own cultural institutions" (Scaer, 2005, p. 7). He argues that cumulative experiences shape every aspect of our existence and finds fault with the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Revised (DSM-IV-R) (APA, 1994), definition of trauma that lists a limited number of identified, specific horrific events. The DSM-IV-R does not take into account events considered *traumatic* in the current

literature such as preverbal trauma experienced by an infant, psychological abuse in a dysfunctional family, social isolation, discrimination, workplace violence, poverty based on race, gender, religion, or nationality. He clearly condones this practice and suggests an alternative model by defining trauma by specific physiological changes that occur in the body and the brain related to negative life experiences that become cumulative and perpetuate those changes over time. Rather than defining trauma merely as extreme stress, Scaer expands the construct to include the broader, cumulative, physiologic aspects of trauma/stress. Drawing from Selye, Freud and many others, he agrees with the notion of an instinctual autonomic response that occurs in the body and brain, yet also concedes that individuals have a finite allostatis load capacity (the cumulative amount of stress that can be tolerated before the body, mind, and emotions begin to deteriorate from stress and related diseases, including depression).

Key to this theory is the role traumatic stress plays in defining our lives, specifically exploring the role maternal infant bonding assumes in developing resistance to harm and threat throughout an individual's life time. A mother's stress, depression, and perceived ability to parent her child (as a result of a violent, intimate relationship and/or previous abuse/neglect as a child) during such a fundamental and crucial time in a child's development has the potential to significantly affect the child's ability to respond to current and future stress in an adaptive manner. Thus an individual raised in a household where intimate partner violence and maternal depression are the *norm* may grow and develop adopting those dysfunctional patterns. Though individual responses are a result of a complex interplay of thoughts, emotions, environment, resources, and so on, early

trauma/neglect leaves the developing child at risk and vulnerable. The goal of restoration of psychological integrity becomes a continual challenge to the individual throughout his or her life time.

By integrating the paradigm of traumatic stress spectrum and the conceptual framework offered by the Appraisal Model, the ability to comprehensively view the stress and depression often associated with intimate partner violence is enhanced. In addition, the desire to address the relational aspects between the environment, the external person, and the internal physiologic-emotive state is established; especially with respect to chronic stress and the desire to use a relational meaning centered approach to analyze the relationship between IPV, maternal depression, and parental stress among a group of high risk postpartum women.

Summary of the Review of the Literature

As indicated by multiple studies, there is ample evidence to suggest a strong relationship between child maltreatment; specifically child neglect and mother to child psychological aggression and intimate partner violence (Cox, Kotch, & Everson, 2003; English, Marshall, & Stewart, 2003; Geffner, Igelman, & Zellner, 2003). Consequences of child maltreatment and exposure to violence have considerable impact on a child's development, extending to diagnosable disorders and impacting on developmental pathways (Margolin, et al., 2000; Rogosch, Cicchetti, Shields, & Toth, 1995). Maladaptive emotional and behavioral outcomes for children can include cognitive distortions (Milner, 2000), externalizing behavior (Kolko 2002), maladaptive peer relationships (Bolger & Patterson, 2001; Laird, Jordan, Dodge, Pettit, & Bates, 2001),

impaired academic functioning (Margolin, et al., 2000), increased risk of psychopathology (Higgins & McCabe, 2000), and insecure attachment relationships (Cicchetti & Toth, 1995; Crittenden & Ainsworth, 1989).

Current research stresses the need to identify high risk populations and work toward conducting comprehensive screening for violence within the family setting for all women. Identification of women at risk for IPV would provide an opportunity for women engaging in or living within an at risk environment to seek assistance and develop additional adaptive coping and problem solving strategies, in addition to reducing the potential for dependence on alternative non-healthful methods of coping such as smoking, alcohol, substance abuse, and suicide. In addition, there remains a continued interest in determining the nature and significance of women's mental health issues associated with IPV, specifically depression. This remains a priority aim as only a small proportion of women with mental health concerns and a desire for assistance actually receive treatment they require (Weinbaum, 2002).

Identification of families at risk for violence continues to be an area in need of investigation as complacency, especially within the mental health setting has moved the focus from the family to the individual. The problem with this approach includes the tendency to compartmentalize care, when a systems approach might serve to address the needs of all family members, especially the children within the family. Children are often the hidden victims of family violence, suffering maltreatment at the hands of their parents who may also be suffering the effects of violence. Child maltreatment,

specifically neglect and psychological aggression, remain an understudied area within family violence research.

These findings are troubling as they indicate an uninterrupted pattern of violence within communities throughout the world despite current prevention and intervention practices. Public health professionals at the local, state, national, and international level (WHO, 2009), have declared violence a public health emergency. Identification of families at risk for violence continues to be an area in need of investigation. This study provides the opportunity to study an identified at risk population of new mothers, offering the chance to characterize a vulnerable population and explore relationships between a mother's previous abuse as a child, IPV, maternal depression, and parental stress. It also permits this researcher to study and describe the influence these maternal stress factors have on the perpetuation of family violence in the form of neglect and psychological aggression and determine if specific maternal stress factors increase the odds of predicting child neglect.

The literature demonstrates a constellation of factors often present in a violent household that may also give rise to behaviors associated with child neglect and psychological aggression. Research has established that women engaged in violent intimate partner relationships often develop maladaptive mechanisms to survive the trauma endured. This study hopes to identify factors that may be helpful in predicting child neglect and mother to child psychological aggression. Lazarus' Appraisal Theory (Lazarus, 1999) and Scaer's Traumatic Spectrum Framework (Scaer, 2005) provide a conceptual basis to examine the relationships between intimate partner violence,

depression, mother's childhood history of abuse, parenting stress, demographic characteristics (mother age at time of child's birth, child's gender, marital status, race/ethnicity), child neglect, and mother to child psychological aggression. Based on current research, one might expect to find that family violence and maternal depression will be prevalent in this population. In addition, significant relationships are expected between previous abuse, current IPV, depression and parental stress and that these factors will be influential in increasing the potential for child neglect and psychological aggression toward the child.

CHAPTER III

METHODS

The purpose of this study was to (a) characterize a vulnerable population of postpartum women at risk for family violence and maladaptive outcomes, and (b) identify maternal factors that increase the risk of child neglect and mother to child psychological aggression. Lazarus' Appraisal Theory (Lazarus, 1999) and Scaer's Traumatic Spectrum Framework (Scaer, 2005) provide a conceptual basis to examine the relationships between intimate partner violence (IPV), depression, mother's childhood history of abuse, parental stress, demographic characteristics (mother's age at time of child's birth, child's gender, marital status, race/ethnicity), child neglect, and mother to child psychological aggression. This chapter presents a description of the research methodology including study aims, study design, sample and sampling, instrumentation, data collection procedures, data analysis, and the protection of human subjects.

Study Aims

Aim I. To systematically examine maternal depression, intimate partner violence, mother's traumatic history as a child, parenting stress, selected

demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers.

Aim II. To describe the relationships between maternal depression, intimate partner violence, and mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers.

Aim III. To explore maternal factors that are most likely to contribute to the incidence of (1) child neglect and (2) mother to child psychological aggression among high risk postpartum mothers.

Research Questions

1. What is the prevalence of maternal stress factors, child neglect, and mother to child psychological aggression that characterize a group of high risk postpartum mothers?
2. What relationships exist between maternal stress factors, child neglect, and mother to child psychological aggression among postpartum mothers?
3. What maternal factors are most likely to contribute to the incidence of child neglect, and mother to child psychological aggression among high risk postpartum mothers?

Research Design

A descriptive correlational design using secondary analysis of longitudinal data collected for the Healthy Families San Diego Clinical Trial (Landsverk, Carillo, Connelly, Ganger, Slymen, Newton, R. et al., 2002) was used for this study. The basic

assumption of this design included the belief that the variables of IPV, depressive symptoms, parental stress, mother's childhood history of abuse, child neglect, and mother to child psychological aggression, exist in this population, yet the direction and strength of the relationships among the variables hasn't been fully explored, making it difficult to formulate accurate predictions about specific actions and outcomes. As with any descriptive, correlational study, variables were not manipulated.

Polit and Beck (2008) define secondary analysis as a form of research in which the data collected by one researcher are reanalyzed by another researcher to answer new research questions. Although the database must be selected with care, there are numerous advantages to conducting a secondary analysis. Perhaps the greatest advantage lies in the money, time, and resources conserved by using data which have already been collected (Moriarty, Deatrick, Mahon, Feetham, Carroll, Shepard, & Orsi, 1999). In addition, the researcher does not need to impose upon the time and patience of the members in the database, nor invade their privacy once again. If the sample is large enough, the database may contain considerably more variables than could be obtained in a smaller sample. A secondary analysis may also allow the researcher to re-examine data, and re-think previous conclusions. Finally, the researcher may be able to use a secondary analysis as a preliminary study to solicit additional funds for further research (Moriarty et al., 1999).

This study used a sample of participants (N = 487) who participated in a study conducted by Landsverk et al. (2002) designed as a repeated measure randomized clinical trial to examine the effect of paraprofessional home visitation for families of newborns deemed at risk for adverse health and developmental outcomes. For the purposes of the

study presented here, the entire sample without making distinction of treatment status was used.

Sample and Sampling

Healthy Families San Diego Clinical Trial (HFSD) was initiated as a comprehensive research and evaluation project with five years of joint funding from the State of California Department of Social Services, Office of Child Abuse Prevention, the California Wellness Foundation, and the Stuart Foundation (Landsverk et al., 2002). Families were identified for the clinical trial through a two stage process, known as Screening and Assessment. In coordination with a large metropolitan women's hospital, each patient who delivered during the previous 24 hours was screened by a review of the medical chart and if eligible received a personal assessment interview.

Procedure

First, early identification workers (EID) utilized two hospital-computerized systems that provided clinical and admission information to identify at-risk families who gave birth from February 1996 to March 1997, using clinical and admission information. The initial screening process occurred within 24 hours after birth of the indexed child. Initial inclusion criteria included residence in the target area, currently not connected to the military and English or Spanish speaking. As shown in Table 1, individuals were excluded if they were unable to speak fluent English or Spanish, had an active/open case with child protection services, or were eligible for home visitation services through another program or agency.

Table 1

Inclusion and Exclusion Criteria for Study Enrollment: Part I

Inclusion:	***Exclusion:***
Criteria	Criteria
Residing in target area	Unable to speak English or Spanish
Non-military	Active to Child Protective Services
Spanish or English speaking	Families eligible for home visitation through another study project

As seen in Table 2, once inclusion or exclusion criteria were met, participants were screened using a 15-item questionnaire of identified risk factors referred to as the Hospital Screen. If the mother endorsed single parent status, late or poor prenatal care, and abortion sought or attempted, she was placed in the study. Similarly, women scoring positively on two or more of the items were also asked to participate in the study. Finally, if seven or more items on the list were unknown, the woman was included in the study.

Table 2

Hospital Records Screen Fifteen-Item at Risk Scale: Part II

Inclusion Criteria for Positive Screen		
Criteria		
a) Item 1, 9, or 12 are true		
b) Two or more items are true, or		
c) Seven or more items were unknown		
1. Not Married	6. Education < 12 Years	11. History of Psychiatric Care
2. Partner Unemployed	7. 0-1 Emergency Contacts	12. Abortion Sought/Attempted
3. Inadequate Income	8. Substance Abuse History	13. Adoption Sought
4. Unstable Housing	9. Late/Poor Prenatal Care	14. Marital/Family Problems
5. No Telephone	10. History of Abortions	15. History of Depression

Note. Adapted from Landsverk, Carrillo, Connelly, Ganger, Slymen, Newton, et al., (2002).

A personal interview or assessment was attempted with all mothers screening positive in the first stage. This assessment consisted of gathering basic demographic information and the 10-item Family Stress Checklist (FSC) (Murphy, Orkow, & Nicola, 1985; Schmitt, & Carroll, 1976). If the family was positive according to the FSC, the mother was invited to enroll in the study at the end of the interview. If she agreed, consent and randomization were completed. Study enrollment began on February 1, 1996 and was completed on March 31, 1997. At the completion of the enrollment period, 488 families had been successfully enrolled; one baby died after the baseline interview, bringing the follow-up sample to 487. The study was set up as a two-group repeated measures design with outcomes measured at one, two, and three years after baseline. Annual interviews and assessments of mothers, children, and the home environment were conducted through the first three years of each child's life. All families were scheduled to receive telephone interviews at four month intervals between the annual assessments.

Measures collected were both questionnaire based and observational in nature. Due to the marked racial/ethnic diversity, measures used demonstrated reasonable confidence of comparability across language groups. As almost 20% of mothers in the study stated a preference for using Spanish, several bilingual interviewers completed assessments. (For a complete description of the HFSD study protocol, see Landsverk et al., 2002).

For the study presented here, predictor variables were chosen as a result of an in-depth literature review, the availability of relevant data from the existing data set, and for their potential to achieve an efficient equation to predict the outcome.

Power, Effect and Sample Size

There is no consensus on the approach to compute the power and sample size with logistic regression; although as pointed out by Katz (2006), ten outcomes for each independent variable is appropriate. In logistic regression an estimate of the probability of a certain event occurring is made, rather than detecting the difference or relationship that may be present, such as in linear regression. No assumptions are made about the dependent variable (DV) and independent variable (IV), the relationship is non-linear, and is not normally distributed (Munro, 2004). Some authors use the likelihood ratio test or the test on proportions; while others suggest various approximations to handle the multivariate case. Several researchers advocate the use of the Wald test since the *z*-score is routinely used for statistical significance testing of regression coefficients (Demidenko, 2007). Since this is a descriptive study and not focused on hypothesis testing, the Final Logistic Regression Model, which includes statistical significance defined by $p < 0.05$, where p is from the Wald test for Confidence Interval for the Odds Ratio and overall statistical significance is tested by the likelihood ratio test $p < 0.1$, was used to demonstrate logistic regression model fit.

Measurements

Independent Variables

Demographic Variables. Demographic variables included (a) mother's age at time of delivery, (b) race/ethnicity, (c) marital status, (d) educational preparation, (e) employment status, (f) history of previous psychiatric treatment, (g) household size,

(h) father of baby living in the home, (i) currently in relationship with a partner, (j) partner is biological father of the child, (k) parity, and (l) child's gender.

Maternal Depressive Symptoms. Maternal depressive symptomatology was measured by the Center for Epidemiology Depression Scale (CES-D), (Radloff, 1977). The CES-D is a 20 item instrument used to identify individuals at risk for depression. The self-test quickly measures depressive feelings and behaviors during the previous week. Most individuals with a score of 16 or higher are encouraged to seek further, more in-depth testing.

Previous research supports the use of the scale in epidemiologic research, in needs assessment studies conducted by or for health planners, and as a screening measure (Zumbo, Gelin, & Hubley, 2002). The CES-D scale, a non-psychiatric self-administered test, is designed to measure depressive symptoms in the general population including depressive mood, feelings of guilt and worthlessness, psychomotor retardation, loss of appetite, and sleep disturbance. It takes approximately five minutes to complete. The items consist of a description of the vegetative symptoms of depression that have been used in previously validated, more inclusive depression inventories, such as the Zung Self-Rating Depression Scale (Zung, 1965), the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979; Beck, & Steer,1984; Beck,Ward, Mendelson, Mock, & Erbaugh, 1961), and the Raskin Scale (Raskin, Schulterbrandt, Reatig, McKeon, 1969). All questions are answered on a scale of 0-3, with 0 indicating no symptom presence and with 3 representing symptoms *most or all of the time*. CES-D scores range from 0 to 60 with higher scores indicating more severe depressive symptoms. A score of 16 or higher

identifies subjects with clinically meaningful depression (Radloff, 1977). Reliability and validly has been reported with Cronbach alpha coefficients ranging from α= .77 to .91. In this study, Cronbach's alpha coefficient for internal consistency reliability α = .84 (year one), α = .79 (year two), α = .79 (year three).

Parental Stress. In this study, parental stress was measured using the Parenting Stress Index: Short Form (Abidin, 1995), an instrument designed to identify stressful aspects of parent-child interactions. This screening and diagnostic instrument was developed with the belief that the total stress a parent experiences is a function of certain salient child characteristics, parent characteristics, and situations that are directly related to the role of being a parent. The child characteristics are measured in six subscales: 1) distractibility/hyperactivity, 2) adaptability, 3) reinforces parent, 4) demandingness, 5) mood, and 6) acceptability.

The parent personality and situational variables component consists of seven subscales: 1) competence, 2) isolation, 3) attachment, 4) health, 5) role restriction, 6) depression, and 7) spouse. The Parenting Stress Index-Short Form (PSI-SF) is particularly helpful in the a) early identification of dysfunctional parent-child systems, b) retention programs aimed at reducing stress, c) intervention and treatment planning in high stress areas, d) family functioning and parenting skills, e) assessment of child-abuse risk, and f) forensic evaluation for child custody. In the HFSD study, parenting stress was measured at years one, two, and three.

The *normal range* for this instrument lies between the 15th and 80th percentiles. An elevated or *high score* is a score at or above the 85th percentile. The profile includes a defensive responding scale designed to assess the extent to which the respondent approaches the questionnaire with a strong bias to present the most favorable impression of herself. This maladaptive approach is used in an attempt to minimize problems or stress in the parent-child relationship. This tendency is indicated by an extremely low score (< 10) on the Defensive Responding Scale.

The first sub-scale of the PSI-SF: *Parental Distress*, reveals the worry and concern a mother experiences in her role as a parent. It is a function of personal factors that are directly related to parenting. Stresses associated with Parental Distress subscale include a) an impaired sense of parenting competency, b) stresses associated with the restrictions placed on other life roles, c) conflict with the child's other parent, d) lack of social support, and e) presence of depression. The second subscale, *Parent Child Dysfunction*, focuses on the parent's perception that her child does not meet her expectations and the interaction between mother and child does not reinforce her role as parent (Abidin, 1995). The mother sees the child as having a negative impact on her life. The third subscale looks at *difficult child* behavioral characteristics of children that make them appear to be easy or difficult to manage (Abidin, 1995). These behaviors may include the temperament of the child as well as learned patterns of dysfunctional, defiant, and demanding behavior.

Finally, the *total score* is designed to provide the researcher with an overall score of parental distress and risk factors. This score does not include stressors in other life

areas; rather it is an indication of the stress level experienced by the mother in her role as a parent. In this sample scale reliabilities include α = .93 (year one), α = .90 (year two) and α= .92 (year three) indicating a high degree of internal consistency.

Intimate Partner Violence. Intimate partner violence is defined as the violence that occurs between two people in a close relationship including a) physical assault as manifested by hitting, kicking, slapping, beating burning or other use of physical force, b) sexual assault/coercion as evidenced by forcing a partner to take part in a sexual act without their consent, and c) psychological aggression as seen by threatening a partner, possessions or loved ones, intimidation, constant belittling and humiliation. Psychological aggression also includes harming a partner's sense of self-worth and various controlling behaviors such as isolating an individual from their family and friends, monitoring their movements, and restricting access to information or money. Associated behaviors include the use of words, gestures, weapons, or other means used to communicate intent to harm (Krug et al., 2002). IPV was measured by the Conflict Tactics Scales ([CTS] Straus, 1979) at baseline and Conflict Tactic Scale-Revised ([CTS2] Straus, Hamby, Boney-McCoy, & Sugarman, 1996) at years one, two and three. The Conflict Tactics Scales have been used for over three decades to evaluate violence within families and intimate relationships.

The CTS2 was developed in response to critiques and recommendations to improve and enlarge the Conflicts Tactics Scales measure of intimate partner violence (Straus, et al., 1996). It is a 78-item scale consisting of 39 behaviors (respondent and

partner) and is the recommended form for assessing partner violence when seeking to assess the type and level of domestic violence. The CTS2 is designed to measure the extent to which partners in a dating, cohabiting, or marital relationship engage in reasoning or negotiation and use their psychological and physical aggression with each other to deal with conflicts (Straus, et al., 1996).

The measure consists of five subscales including negotiation, psychological, aggression, physical assault, injury, and sexual coercion. *Negotiation* looks at the frequency of use of six positive conflict tactics, orientated towards achieving a constructive, adaptive resolution to a given issue. Three items include cognitive problem solving behaviors while the remaining three explore the expression of emotional support. *Psychological aggression* looks at verbal and nonverbal symbolic acts intended to cause psychological pain, fear or shame; ranging from verbal threats to yelling, screaming, or other verbally aggressive displays. Though difficult to measure, verbally aggressive behaviors can have cumulative and lasting negative effects on the relationship. The 12 items on the *physical assault scale* are separated into two categories; minor and severe physical assault; assisting with the goal of characterizing the nature of the assault and the level of danger associated with the victim. The *injury subscale* measures partner-inflicted physical injury, as indicated by bone or tissue damage, a need for medical attention, or pain continuing for a day or more. The items ask how often each of the four types of injury occurred, was it necessary to see a doctor and how often a doctor was actually seen (Straus, et al., 1996). Finally, *sexual coercion* seeks to determine if partners are imposing nonconsensual sexual acts including unprotected oral and anal sex on each other, These

items are grouped as minor or severe. For the study reported here, Psychological and Physical Aggression subscales were used.

The CTS2 offers the opportunity to collect data on respondents and partners by asking and alternating the question from each perspective. In addition, to avoid what Shehan (1995) calls a *context of legitimization* for disclosing behaviors of physical and psychological violence, the CTS2 intersperses items throughout the instrument, rather than in a hierarchical order. This has been shown to reduce the tendency for some participants to answer in response sets, for example, checking *never* on all sexual violence questions without reading the question.

The CTS2 is a measure that works well with young adult and adult populations. A significant number of studies have used the Conflict Tactics Scales and the Conflict Tactics Scales: Revised with various populations including dating couples (Riggs, 1993), married and cohabitating couples (Connelly, Newton, Landsverk, & Aarons, 2000), and adolescents (Houston & Hwang, 1996). It has also been used to explore parental and caregiver behavior (Gelles, 1992) and the intergenerational transmission of family aggression (McCloskey, Figuerdo, & Koss, 1995) including verbal and physical expression of aggression (Hamby & Sugarman, 1999). Socio-cultural-economically diverse population studies have successfully used the scales including incarcerated women, women in shelters (Campbell, Sullivan, & Davidson, 1994) public housing, methadone maintenance clinics, and with Hispanic, African American, Asian and Native American/Alaskan Native populations (Connelly, Newton, Landsverk, & Aarons, 2000; Hamby & Skupien, 1998; Newton, Connelly, & Landsverk, 2001; West, 1995).

Scale validity and reliability has been reported (Connelly et al., 2000; Jones, Ji, Beck, & Beck, 2002; Newton, Connelly, & Landsverk, 2001; Vega, & O'Leary, 2007). In this sample, mother being a victim of psychological and physical aggression was of interest. Scale reliabilities for psychological aggression subscale CTS at baseline α =.77. CTS2 α = .78 (year one), α = .78 (year two), α = .78 (year three). Scale reliabilities for physical aggression subscale CTS at baseline α =.77. CTS2 α = .78 (year one), α = .78 (year two), α = .78 (year three).

Maternal History of Abuse. Maternal report of abuse (including psychological and physical abuse) as a child has also been shown to be a risk factor in maladaptive mental health outcomes including anxiety, depression, substance abuse, and potential perpetuation of intergenerational violence (Bert, Guner, & Lanzi, 2009). Haapasalo and Aaltonen (1999) estimate that up to one third of the variance predicting child maltreatment is accounted for by maternal history of abuse. Maternal maltreatment as a child is defined as a history of exposure to physical or emotional abuse prior to age 18. In this study, maternal maltreatment as a child was measured by the Conflict Tactic Scale Parent Child (CTS-PC) (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The CTS-PC is designed to evaluate psychological and physical maltreatment and neglect of children by their parents (Straus, Hamby, & Warren, 2003). As a variation of CTS2, the CTS-PC measures specific aspects of parent to child interactions. It consists of 22 self-report items that seek to determine the type and frequency of violent and non-violent parent-child interactions. It can be administered as a self-report instrument or as an

interview and takes approximately ten minutes to administer. The words and sentence structure are clear and simple, written so that anyone capable of reading at the fourth to sixth grade level would easily be able to understand and answer. This measure was used to obtain information from the mother, retrospectively, on her experience before age 18. This questionnaire was administered at year three, when all participants reached a minimum age of 18. In this study, Cronbach's alpha coefficient for internal consistency reliability $\alpha = .76$.

Dependent Variables

Child Maltreatment and Mother to Child Psychological Aggression. Dependent variables consisted of two components of child maltreatment: (a) child neglect and (b) mother to child psychological aggression and were measured by the Conflict Tactic Scale Parent Child (CTS-PC) (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The CTS-PC is designed to evaluate psychological and physical maltreatment and neglect of children by their parents (Straus, Hamby, & Warren, 2003). As a variation of CTS2, the CTS-PC measures specific aspects of parent to child interactions. It consists of 22 self-report items that seek to determine the type and frequency of violent and non-violent parent-child interactions that have occurred within the past year. It can be administered as a self-report instrument or as an interview and takes approximately ten minutes to administer. The words and sentence structure are clear and simple. Parents with more than one child are asked to focus their responses specifically towards their interaction with the indexed child. The 22 core items can be grouped into three content areas; Nonviolent Discipline, Psychological Aggression, and Physical Assault.

In addition to the core questions, 13 supplemental items (three supplemental scales) can be administered and evaluated. These include discipline strategies used in the last week and behaviors related to neglect and sexual abuse. The CTS-PC can be used as a clinical screening tool or as an instrument in epidemiological research focused on the identification of child maltreatment. This tool provides the advantage of revealing child maltreatment as early as possible in the child's life so that further assessment and intervention can be offered to the parent-child dyad.

To assess for child neglect mothers were also asked a series of questions regarding their parenting skills, including the five questions listed in Table 3. The five optional neglect items were used as a method of determining the prevalence of neglect in this high risk population (Straus et al., 1998). The possible responses included a) once in the past year, b) twice in the past year, c) 3-5 times in the past year, d) 6-10 times in the past year, e) more than 20 times in the past year, and f) not in the past year.

Psychological Aggression. In addition to neglectful behaviors, mothers were asked about their use of psychological aggression towards their child(ren). Items included behaviors such as (a) calling their child dumb or lazy, (b) threatening to harm their child, (c) threatening to send them away or kick them out of the house, (d) swearing or cursing at the child, or (e) shouting and screaming at the child.

Table 3

Neglect Items: Conflict Tactic Scale-Parent Child Optional Neglect Items

Prompt
Sometimes things can get in the way of caring for your child the way you would like to. For example, money problems, personal problems, or having a lot to do. Please tell me how many times in the past year this has happened to you in trying to care for your child. Please tell me how many times you..."
Questions
1. had to leave your child home alone, even when you thought some adult should be with him/her;
2. were so caught up with your own problems that you were not able to show or tell your child that you loved him/her;
3. were not able to make sure your child got the food he/she needed;
4. were not able to make sure your child got to a doctor or hospital when he/she needed it;
5. were so drunk or high that you had a problem taking care of your child, had to leave your child home alone, even when you thought some adult should be with him/her.

Note. Straus, Hamby, Finkelhor, Moore & Runyan, 1998

Analyses of Data

The statistical analyses included descriptive, non parametric, and inferential statistics. The following techniques were chosen based on the nature of the identified research aims and questions, the number of independent and dependent variables and the level of measurement used with each of the identified variables. The statistical tests included a) univariate analysis of factors; examining cases across one variable at a time, b) one-way ANOVA with post hoc analysis to examine whether there are significant mean differences between identified variables, c) cross tabulations, d) bivariate

correlation to measure the association between two quantitative variables without distinction between the independent and dependent variable, and e) multiple linear regression technique to produce the best combination of predictors of the dependent variable. To achieve this goal, two logistic regression analyses were conducted to identify a combination of independent variables that are limited in few if any ways that are best at predicting child neglect and psychological aggression toward a child among a group of high risk postpartum women.

Study Aims, Research Questions and Statistical Analysis

Aim I. To systematically examine intimate partner violence, maternal depression, mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers.

Question 1. *What is the prevalence of maternal stress factors (IPV, depression, parenting stress, childhood history of abuse) child neglect, and mother to child psychological aggression that characterize a group of high risk postpartum mothers?*

Data were analyzed using descriptive statistics including univariate analysis of factors; examining cases across one variable at a time. Three major characteristics of a single variable were noted including a) the distribution, b) the central tendency, and c) the dispersion. The distribution is a summary of the frequency of individual values or ranges of values for a variable. One of the most common ways to describe a single variable is with a frequency distribution. The central tendency of a distribution is an

estimate of the *center* of a distribution value. There are three major types of estimates of central tendency; the mean, the median, and the mode (Mertler & Vannatta, 2005). The dispersion refers to the spread of the values around the central tendency. There are two common measures of dispersion, the range, and standard deviation. The range is simply the highest value minus the lowest value. The standard deviation is a more accurate and detailed estimate of dispersion because an outlier can greatly exaggerate the range. It also demonstrates the relation that the set of scores has to the mean of the sample. It allows researchers to reach conclusions about specific scores in the distribution.

Aim II. To describe the relationships between intimate partner violence, maternal depression, mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and mother to child psychological aggression among high risk postpartum mothers.

Question 2. *What relationships exist between maternal stress factors, child neglect and mother to child psychological aggression among postpartum mothers?*

The following analyses were conducted to determine potential factors for later model development (Mertler & Vannotta, 2005). One-way ANOVA was conducted with post hoc analysis to examine whether there were significant mean differences in the depressive symptoms of mothers who endorse physically abusive intimate partner violence than those who do not endorse violence within an intimate relationship

(psychological and physical), have a history of childhood abuse (psychological and physical), engage in child neglect, or mother to child psychological aggression.

One-way ANOVA was conducted with post hoc analysis to examine whether there were significant mean differences in mothers age at child's birth in mothers who endorse neglect of child or mother to child psychological aggression compared with those who don't endorse child neglect or mother to child psychological aggression.

Cross-tabulations were computed to examine whether there are significant differences in mothers exposed to violence as a child, race/ethnicity, marital status, child's gender, and the incidence of child neglect or mother to child psychological aggression. When conducting this analysis both psychological aggression and physical abuse were analyzed to determine if one form of violence might have a greater effect than another on the incidence of child neglect or psychological aggression toward the child.

Aim III. To explore maternal factors that are most likely to contribute to the incidence of (1) child neglect and (2) mother to child psychological aggression among high risk postpartum mothers.

Question 3. *What maternal factors are most likely to contribute to the incidence of child neglect and mother to child psychological aggression among high risk postpartum mothers?*

Logistic regression was chosen to produce the best combination of predictors of the dependent variable. Two regressions were computed; one to determine the best predictors for increased risk of child neglect and a second to determine the best predictors for increased risk of mother to child psychological aggression. The goal of a logistic

regression is to predict values on a categorical/dichotomous dependent variable; to identify a combination of independent variables that are limited in few if any ways and best at predicting membership in a particular group as measured by a categorical variable. The challenge is to reduce the number of predictor variables while maintaining a strong level of prediction among the variables (Mertler & Vannatta, 2005). In addition, logistic regression offers more flexibility as it seeks to correctly predict the category of outcome for individual cases. Though similar in process to conducting a multiple regression, the analysis is significantly different.

Forward logistic regression was conducted to determine which of the six selected independent variables: maternal depressive symptoms (year three), parental stress (year three), maternal age, gender of child, intimate partner violence (total physical assault), intimate partner violence: (psychological assault by partner) were predictors for increased risk of child neglect. Data screening led to the elimination of outliers.

A second logistic regression was performed to determine what combination of independent variables; depressive symptoms (year 3), parental stress (year three), child gender, intimate partner violence (psychological and physical assault by partner) increased the risk for mother to child psychological aggression.

Limitations

This study was conducted to characterize a vulnerable population of high risk postpartum women and to identify maternal factors that increase the risk of child neglect and psychological aggression. The limitations of the study and the instruments utilized include the following:

- The sample population was limited to a geographic region in a large metropolitan city located in the southwestern portion of the United States with a largely Latina population. The ethnic distribution, while fairly diverse, was predominately Latina. Though representative of the geographic region, in the general population of the United States, the distribution would have been more evenly distributed between Latinas, Blacks, Asians, other minority groups, and Caucasians.
- The data was collected over ten years ago. The age of the data may seem to be a limitation, however, current empirical studies suggest that the identified independent variables of IPV, maternal depression, previous abuse as a child and parental stress have remained somewhat static within this population.

Protection of Human Subjects

For the parent study, all study procedures including protocols for recruiting participants and obtaining informed consent were reviewed and approved by the appropriate institutional review boards, including Children's Hospital and Health Center - San Diego, San Diego State University, Sharp Mary Birch Hospital, University of San Diego, and the University of California San Diego, by the original investigators. For the secondary analysis, the proposal was submitted with a letter of authorization for the use of the data from Dr. John Landsverk, Principal Investigator, for approval by this investigator (Appendix A) and to the Institutional Review Board of the University of San Diego (Appendix B). De-identified data was provided on an external storage device for review and analysis purposes. The data collection tools were kept locked in a secure location by the original investigators, and made available to this researcher. All

participants were coded by numbers rather than by names, and the original investigators kept the names separately from the coded data tools to maintain anonymity. No potential physical, psychological, or social risks existed to the subjects in this secondary analysis.

CHAPTER IV

RESULTS

The purpose of this study was to (a) characterize a vulnerable population of postpartum women at risk for family violence and maladaptive outcomes and (b) identify maternal factors that increase the risk of child neglect and mother to child psychological aggression. Secondary data analysis using descriptive and multivariant statistics was conducted on pre-existing data collected over a three year period at four pre-determined intervals. In this chapter a discussion of the findings is presented. A descriptive profile of the participants including their scores on the independent measures of victimization, depression, history of victimization as a youth, parental stress, and selected demographics were analyzed. The results related to the specific research questions will be presented.

Participant Profile

The initial aim of the study was to systematically investigate the characteristics that distinguish a cohort of high risk postpartum women and determine the prevalence of maternal stress factors in this vulnerable population. The demographic profile that characterizes this cohort of high risk postpartum mothers (Table 4) included an age range (at the time of delivery) spanning 28 years (14-42 years). The mean age of the

participants was 23.44 years (SD=6.08); 45.6% were 21 years of age or younger. The sample represented an ethnically diverse group: 47.3% Hispanic, 24.2% Anglo, 19.5% African American, and 10.2% Asian/Other. Of the 47.3% Hispanic women, 26.8% identified English as their primary language, while 19.3% listed Spanish. The majority of the mothers (77.3%) were single, 14.3% married, while the remaining 8.2% were divorced, separated or widowed. Over half of this high risk population (54.3%) reported they did not complete high school or obtain a GED. Twenty five and one half percent were high school graduates/GED, 20.1% initiated college coursework, 2.7% completed a two year degree while 1.4% of the women in the survey completed a Bachelors degree. At year one, a little over half of the participating mothers did not work outside the home. By year three, the percentage of mothers working outside the home increased from 51.2% to 69.7%. In terms of women seeking psychological care, only 2.7% admitted to seeking care in the past.

Household size is often indicative of stressed family resources. In this sample, the average household size was four, with a range from one to fourteen individuals per household. In terms of demographic make-up of the family home, slightly more than half (50.8%) of the mothers reported the father of the baby (FOB) living in the home. 68.8% of women reporting said they were currently involved with a partner; with 65.5% noting that their partner was the baby's biological father. Half of the women (50.2%) were first time mothers. Finally, gender of the child was nearly even; 49% male and 51% female.

Table 4

Demographic Characteristics at Baseline of High Risk Postpartum Women

Variable	*f*	%	Variable	*f*	%
Age at Delivery*			Household Size		
Under 20	160	32.8%	1-4	325	66.6%
20-25	169	34.6%	5-8	146	29.9%
Over 25	159	32.6%	9+	17	3.5%
Ethnicity			Father of Baby Lives		
Hispanic: English	131	26.8%	in Home		
Hispanic: Spanish	94	19.3%	No	248	50.8%
Caucasian	118	24.2%	Yes	240	49.2%
African American	95	19.5%			
Asian / Other	50	10.2%			
Marital Status			Currently in a		
Single	377	77.3%	Relationship		
Married	71	14.5%	No	118	30.9%
Divorced	24	4.9%	Yes	263	68.8%
Widowed	2	0.4%			
Separated	11	2.3%			
Unknown	3	0.6%			
Educational Preparation			Partner is Biological		
None	2	0.4%	Father of Baby		
Nursery – 8th Grade	63	12.9%	No	89	33.7%
9th Grade – 12th Grade	200	41%	Yes	173	65.5%
High School Grad/GED	105	21.5%			
Some College/No Degree	10	20.1%			
Associate of Arts Degree	13	2.7%			
Bachelors of Arts Degree	7	1.4%			
Employment			Parity		
Unemployed	255	52.3%	No other children	245	50.2%
Less Than or 20hrs/wk	57	11.7%	Has children	243	49.8%
21-40 hrs/wk	144	29.5%			
More Than 40 hrs/wk	32	6.6%			
History of Previous					
Psychological Treatment			Sex of child		
No	472	96.7%	Male	239	49%
Yes	16	2.7%	Female	249	51%

Note. *M(SD), 23.44(6.1)

Maternal Stress Characteristics

Maternal Depressive Symptoms. The Center for Epidemiological Studies Depression Scale (CES-D) a commonly used, well-established self-report instrument was used to screen mothers for depressive symptoms (Radloff, 1977). Mothers in this study appear to experience a significant level of stress and depressive symptoms with 49% of the sample scoring above the cutoff point for depression of 16 at baseline. This level of stress was not sustained throughout the study as indicated by a progressive reduction in scores at each identified interval, 40.6% year one, 37.4% year two and 30.8% year three. Scores remain elevated for approximately a third of the mothers.

Parental Stress. At year one, Defensive Responding scores <10 were observed in 15.4% of the sample at year one, 14.5% year two; increasing to 19.5% at year three. Parental distress remained elevated all three years; with the exception of a slight increase in percentage at year two; moving from 26.6% to 27.8% respectively. At year three, parental distress score dropped to 20.3%. The Parent Child Dysfunction Scale focused on the parent's perception that her child does not meet her expectations and that the interaction between mother and child does not reinforce her role as parent (Abindin, 1995). The mother sees the child as having a negative impact on her life. In this sample at year one 22.6% of the mothers reported a high score. At year two, the perceived maladaptive relationship continued with 22.7% of the mothers reporting a positive response, while 20.9% of the sample had an elevated score at year three. The third subscale; Difficult Child, examines behavioral characteristics of children that make them appear to be easy or difficult to manage (Abidin, 1995). These behaviors may include the

temperament of the child as well as learned patterns of dysfunctional, defiant, and demanding behavior. In this sample, year two demonstrated a greater challenge for mothers with 20.8% of the mothers scoring high on this measure. At year one, 14.8% of mothers reported high scores, while year three, showed a marked decrease, with 15.2% of the mothers reporting an elevated score. Finally, the total score is designed to provide the researcher with an overall score of parental distress and risk factors. This score does not include stressors in other life areas; rather it is an indication of the stress level experienced by the mother in her role as a parent. In this sample, the total scores remain elevated for approximately one quarter of the mothers throughout the three year interval; 23.7% (year one), 27.3% (year two) and 22.9% (year three).

Intimate Partner Violence. Table 5 outlines the prevalence of intimate partner violence within this high risk maternal population. At baseline over three quarters of the moms (77.4%) endorsed psychological abuse committed by their partner (48.7% mild psychological abuse and 28.7% severe psychological abuse), while a little more than one-third of the mothers (37.1%) endorsed physical violence by their intimate partner. The percentage of mother's reporting psychological aggression remained fairly constant at 77.3% year one, 77.2% year two, and 72.2% year three. For physical abuse, 36.9% reported victimization at year one, 28.7% year two, and 17.5% year three.

Maternal Maltreatment as a Child

Almost three fourths of mothers (70.9%) reported a history of psychological abuse as a child with 68.3% noting a history of corporal punishment. Corporal punishment is defined as the intentional infliction of physical pain as a method of

changing behavior and includes methods such as hitting, slapping, punching, kicking, pinching, shaking, striking with objects such as paddles, belts, and sticks (National Association of School Nurses [NASN], 2002). A little over one third of the mothers reported a history of physical maltreatment (34.7%) and abuse (36.3%).

Table 5

Maternal Stress Characteristics

Characteristic	Baseline *n* (%)	Year One *n* (%)	Year Two *n* (%)	Year Three *n* (%)
Maternal Depressive Symptoms				
No (CESD <16)	249 (51%)	237 (59.4%)	236 (62.6%)	265 (69.2%)
Yes (CESD >16)	239 (49%)	162 (40.6%)	141 (37.4%)	118 (30.8%)
Parental Stress				
Defensive Responding				
Low = ≤ 10		61 (15.4%) low	54 (14.5%) low	74 (19.5%) low
High = ≥ 17		211 (46.3%) high	171 (46%) high	142 (37.4%) high
Parental Distress				
High = ≥ 33		96 (26.6%)	103 (27.8%)	77 (20.3%)
Dysfunctional Interaction				
High = ≥ 26		76 (22.6%)	83 (22.7%)	79 (20.9%)
Difficult Child				
High = ≥ 33		56 (14.8%)	74 (20.8%)	57 (15.2%)
Total Score				
High = ≥ 86		92 (23.7%)	94 (27.2%)	86 (22.9%)
Intimate Partner Violence				
Psychological Aggression				
No	70 (22.6%)	70 (22.7%)	58 (22.8%)	73 (27.8%)
Yes	240 (77.4%)	239 (77.3%)	197 (77.2%)	190 (72.2%)
Physical Assault by Partner				
No	95 (62.9%)	95 (63.1%)	117 (71.3%)	217 (82.5%)
Yes	115 (37.1%)	114 (36.9%)	47 (28.7%)	46 (17.5%)
History of Maltreatment as a Child				
Psychological Abuse				
No				109 (29.1%)
Yes				266 (70.9%)
Corporal Punishment				
No				119 (31,7%)
Yes				256 (68.3%)
Physical Maltreatment				
No				245 (65.3%)
Yes				130 (34.7%)
Physical Abuse				
No				239 (63.7%)
Yes				136 (36.3%)

Child Maltreatment

Child Neglect. During the first year after the birth of the indexed child, 18.9% of mothers who answered the survey reported neglectful behavior towards her child. The rate increased at year two with 22.3% of the mothers who answered the survey reporting neglect. Finally, year three demonstrated a reduction in neglectful activities with 14.8% of the mothers who answered the survey admitting to negligent conduct (Table 6).

Table 6

Prevalence of Child Neglect and Mother to Child Psychological Aggression

Type	Year One		Year Two		Year Three	
	n	%	n	%	n	%
Child Neglect						
No	304	62.3	260	53.3	304	62.3
Yes	92	18.9	109	22.3	72	14.8
Missing	92	18.9	119	24.4	110	23
Mother to Child Psychological Aggression						
No	153	31.4	61	12.5	68	13.9
Yes	241	49.4	310	63.5	308	63.1
Missing	94	18.4	117	24	112	22.5

Mother to Child Psychological Aggression. During the first year after the birth, 49.4% of the mothers responding, reported engaging in psychological aggression with their baby. The prevalence of mother to child psychological aggression peaked at year two (63.5%); decreasing to 63.1% at year three (Table 6).

Aim II. To describe the relationships between, intimate partner violence, maternal depression, mother's traumatic history as a child, parenting stress, selected demographic variables, child neglect, and

mother to child psychological aggression among high risk postpartum mothers.

Question 2. *What relationships exist between maternal stress factors, child neglect and mother to child psychological aggression among postpartum mothers?*

Victims of Psychological IPV and Depression

Question 2a. *Do women endorsing IPV (psychological) have significantly greater depressive symptoms?*

The results indicate the mean level of depression was statistically significantly different for mothers that experienced psychological violence at baseline (M=17.27 SD 9.9), year two (M=14.36 SD 9.65), and year three (M=12.86 SD 9.35) than those mothers who were not experiencing violence at baseline (M=13 SD 10.15), year two (M=10.22 SD 8.28, and year three (M=9.69 SD 7.27); F (1,448) = 5.02, $p < .05$; F (1,251) = 8.74, $p < .05$; $F(1,260) = 6.71$, $p < .01$ respectively. The depression scores for both groups at year two and year three were not at the cut point for depressive symptomatology.

Victims of Physical IPVand Depression

Question 2b. *Do women endorsing IPV (physical) have significantly greater depressive symptoms?*

The mean level of depression was statistically significantly different for mothers that experienced physical violence at baseline (M=18.31 SD 10.08), year one (M = 19.26 SD 9.75), year two (M=16.49 SD 10.05), and year three (M=19.11 SD 8.93) than those mothers who were not experiencing physical abuse at baseline (M=15.9.SD 9.78), year

one (*M* = 12.20 *SD* 9.09, year two (*M*=11.6 *SD* 8.43), and year three (*M*=10.48 *SD* 7.87) *F* (1,454) = 6.49, $p < .05$; *F* (1.294) = 39.25, $p < .001$; *F(1,162)= 10.07*, $p < .001$ *F(1,260)= 40.84*, $p < .001$ respectively. The depression scores for the abused group was above the cutpoint of 16 for all four data collection points in contrast to those not physically abused.

Psychological Abuse as a Child and Depression

Question 2c. *Do women endorsing psychological abuse as a child have significantly greater depressive symptoms?*

The mean level of depression was statistically significantly different at year one (*M* = 15.34 *SD* 10.09), year two (*M*=14.66 *SD* 9.6), and year three (*M*=13.57 *SD* 9.3) for mothers who had experienced psychological abuse as a minor than those mothers who had not at year one (*M* = 12.99 *SD* 8.29), year two (*M*=12.01 *SD* 8.01), and year three (*M*=10.17 *SD* 7.45); *F* (1,332) = 4.29, $p< .05$; *F* (1, 319) = 5.50, $p <.05$; *F(1,373)= 11.57*, $p < .001$ respectively. At baseline victimized moms reported higher mean scores (above the cutpoint of 16) of 17.33(10.39) in contrast to non-abused mothers, (*M*=15.64 *SD* 9.12), *F* (1.373) = 2.17, $p > .05$ but not at a statistically significant level.

Victims of Physical Abuse as a Child and Depression

Question 2d. *Do women with a history of physical abuse as a child have a higher incidence of depression than women without a history of maltreatment as a child?*

The mean level of depression was statistically significantly different at year one (*M* = 16.36 *SD* 10.35), and year two (*M*=15.44 *SD* 10.0), for mothers who experienced

physical abuse as a minor than those mothers who had not at year one (M = 13.69 SD 9.1) and year two (M=13.07 SD 8.71); F (1,332) = 5.93, p< .05 and F (1, 319) = 4.84, p<.05 respectively. At baseline both groups of mothers reported means scores greater than the cutpoint (M = 17.94 SD 11.30) in contrast to non-abused mothers, (M=16.25 SD 9.30), but they were not statistically significantly different - F (1.373) = 2.39, p > .05.

Maternal Age at Time of Delivery and Child Neglect

Question 2e *What is the relationship between maternal age at the time of delivery, child neglect, and mother to child psychological aggression?*

A One-Way ANOVA was conducted to examine whether there were differences in the mean scores between maternal age at time of delivery and a) child neglect and b) mother to child psychological aggression. Findings indicated there was no statistically significance difference in the age of mother at birth of child with mothers reporting child neglect (M= 24.13 SD 5.8) and those who did not (M = 23.34 SD 6.2) F (1,374) = .94, p > .05. Similarly, there was no statistically significance difference in the age of mother at birth of child in those who reported mother to child psychological aggression (M= 23.70 SD 6.0) and those who did not (M = 22.6 SD 6.5) F (1,374) = 1.66, p > .05.

Psychological Abuse as a Child, Child Neglect, and Psychological Aggression

Question 2f. *Do mothers who endorse psychological abuse as a child engage in child neglect or mother to child psychological aggression?*

The results indicate a greater percentage of mothers (93.5%) who experienced psychological abuse as a child acknowledged using psychological aggression towards

their baby as compared with mothers who were not psychologically abused χ^2 (1,368) = 38.52, p <.05. However, 77% of the mothers who reported psychological aggression as a child did not report neglecting their baby $\chi 2$ (1,368) = 9.6, p <.01 while 23.4% reported both psychological abuse as a child and neglectful behavior towards their baby.

Question 2g. *Do mothers with a history of physical abuse as a child engage in child neglect?*

Approximately 75% (74.4%) reported experiencing physical maltreatment as a child, yet did not engage in child neglect behaviors χ^2 (1,368) = 4.83, p <.05.

Parental Stress and Maternal Depression

Year one, two and three all showed significant correlations between parental stress and maternal depression. Table 7 outlines the r values. At year one, the total parental stress score indicating the overall stress a parent is experiencing in the role as parent (Abidin, 1995), reveals a moderate positive association between parental stress and maternal depression at year one r = .509, p=.000, year two: r = .352, p = .000 and year three r = .266, p = .000; indicating that significant relationships exist between parental stress and maternal depression for all three years.

Table 7

Correlational Matrix A. Parental Stress and Maternal Depression

	Y1 PSI Parental Stress	Y2 PSI Parental Stress	Y3 PSI Parental Stress	BL CESD Depressive Symptoms	Y1 CESD Depressive Symptoms	Y2 CESD Depressive Symptoms	Y3 CESD Depressive Symptoms
Y1 PSI Parental Stress	1						
Y2 PSI Parental Stress	.552**	1					
Y3 PSI Parental Stress	.468**	.609**	1				
BL CESD Depressive Symptoms	.360**	.276**	.258**	1			
Y1 CESD Depressive Symptoms	.509**	.352**	.266**	.446**	1		
Y2 CESD Depressive Symptoms	.338**	.450**	.326**	.320**	.469**	1	
Y3 CESD Depressive Symptoms	.263**	.384**	.435**	.330**	.447**	.527**	1

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Parental Stress and Intimate Partner Violence

Year one, two and three all showed significant point biserial correlations between parental stress and intimate partner violence (Table 8). At year one, the total parental stress score; indicating the overall stress a parent is experiencing in the role as parent (Abidin, 1995) reveals a significant positive relationship between psychological $r = .202$, $p = .001$, physical assault $r = .308$, $p = .000$, and intimate partner violence. Year two offers similar results: psychological, $r = .236$, $p = .000$, and physical $r = .263$, $p = .001$ as does year three psychological $r = .259$, $p = .000$, and physical $r = .328$, $p = .000$. Looking at the subscales of the Parenting Stress Index reveals a similar pattern of significant relationships between psychological aggression, and physical assault within an intimate relationship for the mother and parenting stress categories of defensive responding, difficult child, and parental distress. The only exception to this observation is seen in absence in all three years of a significant relationship between parent/child dysfunctional interactions and mother to child psychological aggression.

Intimate Partner Violence, Maternal Depression and Maternal Abuse as a Child

The data analysis (Table 9) provided statistically significant findings including a moderate positive correlation between current depressive symptoms at year three and parental stress $r = .444$, $p = .00$, intimate partner violence: physical abuse $r = 0.352$, $p = 0.00$, psychological abuse $r = .286$, $p = 0.001$, and a weak positive correlation with physical abuse as a child $r = .102$, $p = < .048$, and psychological abuse as a child, $r = .171$, $p = .001$. This analysis revealed statistically significant correlations between experience of physical abuse as a child and current IPV $r = .125$, $p = < .04$, current

recipient of psychological abuse $r = .26$, $p < .001$, current recipient of physical abuse $r = .32$, $p < .001$, and parenting stress.

Table 8

Correlational Matrix B. Maternal Stress Factors: Parental Stress and Intimate Partner Violence

Point Biserial	Y1 PSI Total	Y2 PSI Total	Y3 PSI Total	T1 Total Psych Aggression	T1 Total Physical Assault	T2 Total Psych Aggression	T2 Total Physical Assault	T3 Total Psych Aggression	T3 Total Physical Assault
Y1 PSI Total	1								
Y2 PSI Total	.530**	1							
Y3 PSI Total	.473**	.591**	1						
T1 Total Psych Aggression	.202**	-.012	.028	1					
T1 Total Physical Assault	.308**	.154*	.174**	.542**	1				
T2 Total Psych Aggression	.082	.236**	.174**	.497**	.175*	1			
T2 Total Physical Assault	.201*	.263**	.177*	.226*	.240**	.467**	1		
T3 Total Psych Aggression	.040	.077	.259**	.421**	.266**	.643**	.333**	1	
T3 Total Physical Assault	.111	.189**	.328**	.050	.254**	.285**	.426**	.420**	1

Table 9

Correlational Matrix C. Maternal Health Factors: Maternal Depression, Parental Stress, and Maternal Abuse as a Child

Point Biserial	Y3 CESD Total	Y3 PSI Total	Psych Abuse as Child	Physical Abuse as Child	T3 Total Psych Aggression: R is victim	T3 Total Physical Assault: R is victim
Y3 CESD Total	1					
Y3 PSI – Total	.444**	1				
Experienced Psychological Abuse as Child	.171**	.072	1			
Experienced Physical Abuse as Child	.102*	.061	.458**	1		
Time 3 Total Psychological Aggression: R is victim	.286**	.259**	.264**	.205**	1	
Time 3 Total Physical Assault: R is victim	.352**	.328**	.059	.125*	.420**	1

Aim III. To explore maternal factors that are most likely to increase the odds for (a) child neglect and (b) mother to child psychological aggression among high risk postpartum mothers.

Question 3. *What maternal factors are most likely to increase the odds of child neglect and mother to child psychological aggression among high risk postpartum mothers?*

Maternal Predictors of Child Neglect

A forward logistic regression was conducted to determine which of the six selected independent variables/maternal depressive symptoms including: maternal depressive symptoms (year three, parental stress (year three), maternal age at child's birth, gender of the child, history/current physical IPV and psychological IPV; neglecting the risk for child neglect.

Data screening led to the elimination of outliers. Correlations and ANOVA analyzes were performed prior to the logistic regression to determine variables to be included in the model. Regression results (Table 10) indicate the overall model of six predictors was statistically reliable in distinguishing between the presence or absence of child neglect. $\chi^2(5)$ 37.238, $p < .0001$. The Hosmer and Lemeshow Chi-Square test of goodness of fit (Table 10) was used to test for overall fit of the binary logistic regression model. This test is considered more robust than the traditional chi-square test, particularly if continuous covariates are in the model or sample size is small. A finding of non-significance ($p = .237$) signifies that the model adequately fits the data. The model correctly classified 84% of the cases. Regression coefficients are presented in Table 11. Wald statistics indicated that increased parental stress, $p=.003$ significantly increased the odds for child neglect with being in an abusive relationship at year three, both psychological aggression and physical assault approached significance. However, odds ratios for this variable are fairly small, indicating little change in the likelihood of reducing child neglect (Table 11).

Table 10

Logistic Regression: Development of a Predictive Model Addressing Child Neglect

Step 1	Chi-square	df	Sig.
Step	37.238	6	.000
Block	37.238	6	.000
Model	37.238	6	.000

Model Summary

Step 1	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
	204.268	.135	.221

Hosmer and Lemeshow Test

Step 1	Chi-square	df	Sig.
	10.415	8	.237

Table 11

Regression Coefficients for Child Neglect

Step	B	S.E.	Wald	df	Sig.	Exp(B)
Depressive symptoms (CESD) Year 3	.000	.023	.000	1	.987	1.000
Parental Stress (PSI) Year 3	.031	.010	8.795	1	.003	1.031
Maternal Age	-.040	.035	1.323	1	.250	.961
Gender of the Child	.262	.359	.530	1	.467	.770
IPV: Physical Assault	.127	.068	3.473	1	.062	1.135
IPV: Psychological Aggression	.053	.028	3.490	1	.062	1.054
Constant	-3.079	1.154	7.113	1	.008	.046

A second logistic regression was performed to determine what combination of independent variables: depressive symptoms (year three), parental stress (year three), ethnicity, intimate partner violence (psychological and physical assault by partner) and child's gender); increases the risk for mother to child psychological aggression. Table 12 indicates the overall model of five predictors was statistically reliable in distinguishing maternal use of psychological aggression as a method of communication and discipline.

Table 12

Logistic Regression: Development of a Predictive Model for Psychological Aggression

Step 1	Chi-square	df	Sig.
Step	39.761	5	.000
Block	39.761	5	.000
Model	39.761	5	.000

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	207.733	.143	.232

Hosmer and Lemeshow Test

Step 1	Chi-square	df	Sig.
	7.362	8	.498

The Hosmer and Lemeshow Chi-Square test of goodness of fit was used to test for overall fit of a binary logistic regression model. A finding of non-significance (p = .498) signifies that the model adequately fits the data. $\chi^2(5)$ 39.761, p > .0001. The model correctly classified 82.5% of the cases. Regression coefficients are presented in Table 13. Wald statistics indicated that increased parental stress (p = .017), presence of intimate partner violence: physical abuse (p = .020) and psychological abuse (p = .000)

significantly increased the odds of mother to child psychological aggression. However, odds ratios for these variables are fairly small, indicating little change in the likelihood of reducing psychological aggression (Table 13).

Table 13

Regression Coefficients for Psychological Aggression

	B	S.E.	Wald	df	Sig.	Exp(B)
Depressive symptoms (CES- D) Year 3	.024	.026	.842	1	.359	1.024
Parental Stress (PSI) Year 3	.027	.011	5.657	1	.017	1.027
Gender of the Child	.246	.357	.473	1	.492	1.279
IPV: Physical Assault	.229	.099	5.370	1	.020	.795
IPV: Psychological Aggression	.224	.057	15.155	1	.000	1.250
Constant	-1.646	/982	2.811	1	.094	.193

CHAPTER V

DISCUSSION

Violence has been declared a priority by the Centers for Disease Control and the World Health Organization. The push to determine the factors that contribute to the initiation, maintenance, and perpetuation of this devastating phenomenon is essential if healthcare providers are to preempt the emotional, psychological and physical outcomes associated with violence. One facet of violence, family violence, specifically child neglect and mother to child psychological aggression, has the potential to impact the health and development of future generations and may be instrumental in contributing to the perpetuation of intergenerational violence. It is for this reason, that family violence remains a topic worthy of continued exploration and analysis.

This study was designed to (a) characterize a cohort of high risk postpartum women at risk for family violence and maladaptive outcomes and (b) determine to what degree those attributes increase the risk for child neglect and mother to child psychological aggression. This study sought to contribute to the existing knowledge and to explore the role specific maternal stress factors play in the genesis of child neglect

and mother to child psychological aggression. The factors of interest included intimate partner violence, previous maternal childhood abuse, maternal depressive symptoms, and parental stress. These risk factors were chosen as they have been shown to place children at risk for neglect and maladaptive developmental outcomes (Campbell, Sullivan, & Davidson, 1995: Hazen, Connelly, Kelleher, Barth, & Landsverk, 2006).

Characterization of High Risk Postpartum Women

Maternal Age. The initial goal of this study was the characterization of a cohort of high risk postpartum mothers. The inclusion criteria consisted of a positive screening for previously identified high risk categories to allow the researcher the opportunity to study a population at risk for untoward outcomes including family violence. One of the initial questions explored in this study centered on the relationship between maternal age at the time of delivery and the incidence of child neglect. Maternal age was identified as a risk factor for neglect in a review of the literature by Gaudin (1999). In addition, Peerson (2001) found that neglectful mothers tended to be *younger* when they had their children, have less education, and higher levels of depression and parental stress. Similarly, the combination of poverty and young maternal age was identified by Lee and Goerge (1999) as contributing to child neglect. They reported that children born to mothers 17 years of age or younger who lived in high poverty areas were 17 times more likely to have a substantiated case of neglect than children born to mothers who were 22 years of age or more living in poverty.

The findings in this sample indicated that mother's age at time of birth was not statistically different from those reporting neglect and those who did not. This was in

contrast to the findings previously mentioned reporting younger mothers were at increased risk for neglect. What isn't clear is whether using mother's age at time of child's birth is a better indicator than age of mother at time of interview. Previous work by Connelly and Straus (1992) found maternal age at time of delivery significantly related to risk for child physical abuse. It is important to note however that Connelly and Straus did not tease out child neglect and psychological abuse from the general category of child maltreatment/abuse as was done in this study. These results highlight the complex nature of child neglect and point to the contribution of other factors including: education, socio-economic status, and marital status. It is difficult to interpret these results, as they contradict the findings of previous studies as well as the current accepted assumption that neglectful mothers tend to be younger, have less education and lower socio-economic status. It would be of interest to replicate the study to determine if the findings were an anomaly, specific to this group of high risk postpartum women, or to determine if other variables confounded/skewed or in some other way effected the results.

Marital Status. In describing this cohort of high risk postpartum women, it is prudent to discuss marital status as previous studies have identified marital status as a risk factor for child maltreatment. Research shows that unmarried mothers tend to be more economically disadvantaged than their married counterparts with lower incomes, reduced educational preparation and greater dependence on welfare programs than married mothers (Moore, 1995). To put these data into perspective the Child Trends Data Bank (2008) in conjunction with the Centers for Disease Control (2008), report that the

percentage of unmarried women has steadily increased over the past four decades from 5.3% of births occurring to unmarried woman in 1960 to 36.8% in 2005. In 2008, nearly four in ten births (39.7%) in the United States were to unmarried women (CDC, 2008), up from 34% in 2002. The birth rate has risen considerably for unmarried women in their twenties and over, while declining or changing little for unmarried teenagers. Most births to teenagers (86% in 2007) were non-marital, while 60% of births to women 20–24 years of age and nearly one-third of births to women 25–29 years of age were non-marital in 2008. In this study, 77.3% of the women were single at the time of delivery.

These findings are significantly higher than the nationally reported average. Yet, upon further exploration of the identified high risk factors such as educational preparation (54.8% of participants did not finish high school), employment status (a little over half of the mothers queried were unemployed), ethnicity and primary language spoken (47.3% Hispanic and 19.3% identified Spanish as their primary language), the number of single women in this study is not surprising as the combination of these factors place these new mothers at an obvious disadvantage and at high risk for untoward outcomes. These findings suggest a continued need on the part of healthcare organization and community initiatives to seek our evidence-based strategies for all women during the perinatal period to assist in reducing the potential for undesirable, potentially deleterious outcomes.

In the past, preventative strategies, focused primarily on young women during the perinatal period. While the data does not support a statistically significant relationship between the age of the mother at the birth of her child and child neglect, it remains sensible to continue to focus attention on prevention strategies for all women during their

childbearing years as it appears that a combination of factors such as educational preparation, financial status, marital status and number of individuals living in the household during that crucial time period play a role in coping with challenges of caring for infants and other child/family members living in the home. What these results imply is that more aggressive prevention strategies are needed for all women during the childbearing years.

Maternal Stress Factors

In addition to the characterization of this high risk postpartum population, relationships between maternal stress factors were explored. Maternal stress factors investigated in this study included: a) depression b) parental stress c) violence within an intimate relationships, and d) history of maternal abuse as a child.

Depression and Intimate Partner Violence. Depression is one of the most common complications of pregnancy and is considered the most common mental health outcome in women exposed to IPV (Campbell, 2002; Golding, 1999). Throughout this longitudinal study, depressive symptomatology was prevalent among new mothers and significantly elevated at baseline (49%), and remained moderately elevated all three years of the study; 40.6% (year one), 37.4% (year two) and 30.8% (year three). Empirical evidence indicates that women who are victims of IPV are more likely than non-victims to suffer from depression (Campbell, Sullivan & Davidson 1995; Krug et al., 2002; Roberts, 1998). This was certainly true for this population of high risk women. An interesting finding included a decline in depressive symptoms over time; coinciding with a decrease in physical and overall violence in the family setting. This finding was similar

to that of Cascardi & O'Leary (1992) who found that symptoms of depression tended to lessen over time and was correlated with the ending of intimate partner violence. Yet, healthcare providers have not successfully developed evidence-based strategies to determine, with some precision, when IPV is active in the home. As a frequent outcome of IPV, depression is often a red flag pointing to the presence of violence in the home. Assessing for depressive symptomatology in addition to IPV during routine and acute healthcare visits may be a more effective method of determining the presence of family violence and depression in women of child bearing age. If the goal is the prevention and elimination of violence and the outcomes associated with the perpetration of violence researchers must continue to pursue studies that develop and evaluate violence prevention and early detection/intervention programs. Further research is also needed to determine the mediating and moderating factors associated with depression in women exposed to IPV.

Children of Depressed Mothers at Risk for Negative Outcomes.

Clearly, discord between intimate partners not only has the potential to impact maternal depression, but child outcomes as well. Hammen (2007) notes "the environment in which children of depressed parents are raised may greatly affect their outcomes and experiences beyond or in addition to, the effects of depression itself" (p. 183). It is generally accepted that women hold a pivotal position in the health and function of the family. However, maternal depression is not conducive to adaptive parenting and can have an extremely negative impact on child rearing practices (Nonacs, 2005), including a child's development of maladaptive emotional regulation through the

ineffective modeling of emotional expression/regulation by the mother. The prevalence of maternal depressive symptoms among women in this study calls into question her ability to fully and adaptively nurture and care for her child. Depressed mothers have been described as insensitive, inattentive, and psychologically unavailable to their children (Cox, Puckering, Pound, & Mills, 1987; Goodman & Brumley, 1990). Psychopathological risks for children associated with parental depression have also been reported (Rutter, Silberg, O'Connor, & Simonoff, 1999). Unfortunately, the majority of individuals with depressive symptomatology do not seek treatment; thus perpetuating the maladaptive behaviors associated with depression. The need for early assessment and re-assessment of women during the perinatal period is an essential component in the drive to prevent maternal depression and child neglect. However, identification of depressive symptoms must include a strategy to assist the new mother at risk for depression to seek out and actively engage in a plan of care that includes psychiatric/mental health treatment and recovery.

This study found that approximately half (49%) of the women reported depressive symptomatology at baseline. This is a noteworthy finding to consider when compared to the United States estimates of lifetime prevalence of Major Depressive Disorder for women: 17%-21% (Bauer, Rodridgues, & Perez-Stable, 2000). Despite the moderate decline in the prevalence over the three years of the study, 30.8% of the women surveyed continued to endorse depressive symptomatology; well above the national average.

Depression in an insidious, invisible, often times silent illness. It is frequently accompanied by denial and shame. While a great deal of research has explored the impact

of maternal depression on postpartum women and their children, early identification, and prevention strategies are needed to identify and treat depression in women endorsing family violence. Many primary care providers recognize the prevalence of family violence within their patient populations and have begun to screen for depression and IPV during routine examinations. The American College of Gynecologists has identified the screening and treatment of maternal depression as a priority issue as it is considered the most common complication during pregnancy and the number one risk factor for postpartum depression (Zinberg, 2007). While this shift in focus should be applauded, it is not enough. Research efforts must also strive to learn more about depression throughout the childbearing cycle; especially with women living in violent homes.

Parental Stress Impacts the Risk of Child Neglect. In addition to violence and depression, parental stress has been identified as another area that significantly impacts the risk of child neglect and mother to child psychological aggression. The exploration of parental stress; or stress associated with the mother's role as parent, provided the researcher with a more in depth picture of the precipitating behaviors and events that may lead to child neglect and psychological aggression in the home. In this study, stress within the parental role was measured by the Parental Stress Index (PSI). The results were used to assist the researcher in identifying stressful aspects of parent-child interactions. Because this scale is broken into three sub-scales in addition to a total score, the analyses included an exploration of specific components of the parent-child relationship.

Parental distress reveals the worry and concerns a mother experiences in her role as a parent. The parental distress score may be affected by conflict with the parent's significant other, lack of social support, and the presence of maternal depression. The results observed in this high risk population included an elevation for at least one-fourth of the mothers all three years; indicating that at least 25% of the participants are apprehensive about their parenting ability. This concern may be as a result of a lack of social support, the presence of maternal depression, or some other deficit in the mother's perception of her ability to parent. The elevated presence of maternal depression in this cohort supports previous research as well as Scaer's hypothesis that stressful personal incidents have a cumulative effect on the individual that may precipitate altered or even exaggerated responses; leaving the mother feeling vulnerable with limited options or resources. She may even question her ability to parent her child.

Similarly, one-fourth of the participants expressed the concern that their child did not meet their expectations; implying that the interaction between mother and child is not reinforcinge her role as parent (Abidin, 1995). The parental distress sub-scale, scores remained somewhat elevated throughout the study; indicating that the mother may view her child as having a negative impact on her life. These percentages raise a red flag concerning the potential for neglect and mother to child psychological aggression providing an opportunity for early intervention.

The third subscale looked at behavioral characteristics of children that make them appear to be easy or difficult to manage (Abidin, 1995). These behaviors may include the temperament of the child as well as learned patterns of dysfunctional, defiant, and

demanding behavior. In this sample, year two demonstrated a greater challenge for mothers with 20.8% of the mothers scoring high on this measure. Elevated scores provide a valuable indicator/red flag of the potential for child maltreatment and factors associated with the perpetuation of generational violence.

Finally, the total score is designed to provide the researcher with an overall score of parental distress and risk factors. The results indicated that one fourth of the mothers continued to experience parental distress throughout the three years of the study, placing the child at increased risk for maladaptive outcomes. These elevated scores add an additional stressor between mother and child, potentially increasing the risk for child maltreatment. Elevated scores on the PSI can be reframed as a valuable opportunity to open a dialogue concerning the cycle of violence and the potential long term effect on the family. Healthcare professionals should be encouraged to continue utilizing the PSI as a preventative/assessment tool in the drive to prevent child neglect and mother to child psychological aggression.

Intimate Partner Violence and the Perpetuation of Generational Violence.

For the purposes of this study, the spectrum of abuse was used as an alternative conceptual framework to describe the fluidity of abusive acts within intimate relationships. Categories explored within the abuse spectrum include: a) psychological abuse (also referred to as emotional or verbal abuse), b) physical abuse, c) sexual abuse, and d) stalking. The focus of this study included psychological and physical violence within intimate relationships; each of which imply an action used to mistreat someone, attack someone or to hurt another person (Mills, 2008). The tendency to rank violent

incidents and their significance is one that must be defended against as all forms of abuse are potentially significant.

The literature reports a wide range of intimate partner violence among the general population, ranging from 10%-60% (Tjaden & Thoennes, 2000b). However, it has been difficult to precisely quantify the prevalence of IPV against women as many victims are hesitant to report the violence inflicted against them. The reasons vary and include fear of retribution and removal of financial support, guilt and shame over their perceived role in the continuation of the maltreatment, the phenomenon of learned helpless and denial regarding the seriousness of the violent activities in the family. When studying vulnerable populations the need to provide a safe and confidential environment that will allow full disclosure is crucial.

In this study, interviews were conducted over the phone and in the participant's home at times that were convenient and safe for the mother. Psychological and physical violence percentages among this high risk population were significantly greater than those reported in the National Violence Against Women Survey (Tjaden & Thoennes, 2000b). These findings are not terribly surprising given the criteria for inclusion in the study. However the results will be added to the current literature that seeks to explore the roots and perpetuating circumstances of generational violence.

In this study, almost three-fourths of the mothers interviewed reported exposure to psychological aggression at baseline. These scores remained relatively constant throughout the three years of the study. The mean level of depression was statistically significant for mother's endorsing psychological aggression within an intimate

relationship; reinforcing previous research that suggests psychological violence may be more predictive of depression in women than physical violence and potentially more debilitating. Chronic threats, belittling, humiliation, isolation, coercion and manipulation often produce feelings of shame, rejection, guilt, fear and anger in women exposed in what is proposed to be a safe environment; the home. As in the case of many of the participants in this study, depression is often an outcome of psychological aggression.

Physical assault by an intimate partner was less prevalent than psychological aggression committed by a partner; however the data demonstrated that women endorsing physical IPV had greater depressive symptoms than those not experiencing physical IPV. Over one third of the mothers admitted exposure to physical violence at baseline and at the child's first birthday. The prevalence decreased slightly by the second birthday to a little over one-fourth of the participants, however, 17.5% continued to endorse physical violence in the home by the child's third birthday; representing 46 young women and at least 46 children caught in the cycle of abuse. In other words, these women and children are living in an environment that places their mental health and development at risk. The findings were greater than expected and were more extensive than those reported by NVAWS (Tjaden & Thoennes, 2000b).

When reporting IPV prevalence data, it is important to keep in mind that psychological aggression and physical assault do not often occur in isolation. Physical aggression is often accompanied by psychological aggression. However, the study of psychological abuse within an intimate relationship presents specific challenges. The difficulty lies in the elusive nature of emotional/verbal/psychological abuse as it leaves

no visible scars making it difficult to hold the perpetrator accountable. The range of behaviors in this category including cursing, shouting, screaming, insults, sarcastic remarks, social isolation, manipulation, threats, and neglect all have the potential to produce negative psychological outcomes for mothers and by association their children.

The effect psychological and physical violent episodes have on a mother's parenting skills were of great interest in this analyses. Psychological aggression toward the mother by her partner remained elevated throughout the study; possibly indicating that these behaviors have become the norm in the family. Yet, minimizing the impact of the violence perpetuates maladaptive parental responses. This is a troubling trend. All forms of IPV must be viewed in relation to other forms of family violence such as child maltreatment in order to achieve a complete picture of the issues inherent within violent families and to determine the best intervention strategies for families at risk in an attempt to interrupt the cycle of generational violence.

Previous Abuse Increases Risk Factors. Maternal report of maltreatment (including psychological and physical abuse) as a child has been shown to be a risk factor in maladaptive mental health outcomes including anxiety, depression, substance abuse, and potential perpetuation of intergenerational violence; an environmentally mediated risk factor (Ethier, Couture, & Lacharite 2004;.Jaffee, Caspi, Moffitt, & Taylor, 2004). Each of these aspects of maltreatment places a mother at higher risk for abuse and neglect of her own children (APA, 1996).

At year three, interviewers encouraged mothers to recall their own childhood and were asked if they had ever experienced abuse or neglect as a child. The literature

supports this line of questioning as women with a history of violence in their lives often continue the cycle of abuse by repeating several of the same patterns that were modeled to them demonstrating the assertion that woman with a history of violence as a child often perpetuate the violence and go on to harm their own children. Three-forths of the new mothers endorsed psychological abuse as a child, while 68.4% reported receiving corporal punishment. One-third of the mothers reporting endorsed a history of physical pain.

In this population of high risk mothers, previous maternal psychological abuse as a child was significantly positively associated with depression. Although mean scores for depression from baseline through year three were all greater than the cutoff point of 16, only year one and two were statistically significant for mothers endorsing physical abuse as a child, than those who did not. At baseline both groups of mothers reported means scores greater than the cutpoint M = 17.94 SD 11.30) in contrast to non-abused mothers, (M=16.25 SD 9.30), but they were not statistically significantly different.

The results support previous studies that found women who endorse IPV and previous traumatic history have significantly greater depressive symptoms than those that do not endorse a history of IPV; increasing the chaos found within a family. A substantive body of research has become available within the last decade on the effects maternal depression have on a mother's ability to parent her children; specifically the correlation of maternal depression and child maltreatment. Depression, and parental stress in this population increase the risk for: a) maladaptive mental health outcomes for the mother, b) child neglect as seen by maternal inattention to the needs and safety of the

child, and c) psychological aggression towards the child as manifested by harmful verbal responses to child behaviors (Browne & Hamilton, 1999).

Child Neglect and Mother to Child Psychological Aggression

Living in a home where violence is a common and accepted method of communication and conflict management among its members, places other individuals living in the home, especially children, at great risk for child neglect and abuse. Though the instigators of relationship violence are often the same individuals that go on to harm others in the family, the research shows that mothers; especially those with a history of abuse as a child and a previous or current violent relationship often engage in child maltreatment including neglect and psychological violence (Straus & Gelles, 1989). While women are viewed as the primary victims of partner violence due to the higher injury levels and initiation of violence for self-defense purposes (Saunders, 2002), men constitute at least one-third of those injured (Archer, 2002). It is therefore important, when exploring the links between IPV and child maltreatment, to consider the roles fathers and mothers play in child maltreatment. Victims of IPV must be considered in this matrix of abuse as it is not only IPV perpetrators that maltreat their children. Straus and Gelles (1989) note that women victimized by their partners were twice as likely to physically harm their children as women not abused by their partners. Salzinger, Feldman, Ng-Mak, Mijica, Stockhammer, and Rosario (2002) found that the presence of IPV in addition to other family stressors increased the odds of potential child maltreatment 2.5 times. Similarly, Dixon, Hamilton-Giachritsis, Browne, and Ostapuik

(2007) concluded that women victimized by their partners were significantly more likely to neglect their children.

Mother to child psychological aggression appears to be highly prevalent in this group of high risk mothers. Almost half (61%) of mothers reported engaging in psychologically aggressive behaviors with their child at year one. The incidence of this behavior peaked at year two as 63.5% of mothers endorsed psychological aggression, reducing only slightly (63.1%) at year three. Clearly, psychological aggression is a frequently used method of communicative interaction by these high risk mothers. Vissing, Straus, Gelles, and Harrop (1991) have indicated that psychological aggression may actually be more damaging than physical assault. Vissing et al. (1991) define *damaging* as the long effects associated with psychological aggression including delinquency, substance abuse, violence and interpersonal problems. Yet the question remains: How and why are these maladaptive, damaging, ineffective patterns of behaviors perpetuated? How would the introduction of social support, in home counseling and intensive interactive education change the predictive negative outcomes? How might resources be of use?

High Risk Families are Vulnerable to Internal and External Stressors.

The findings of this study provided the researcher with important preliminary data to utilize in the development of a predictive model. The findings of the logistic regression indicated that the overall model of six predictors including maternal depressive symptoms, parental stress, maternal age, physical and psychological intimate partner violence was statistically reliable in predicting the risk of child neglect in 84% of the

cases and psychological aggression in 82.5% of the cases. Interestingly, in this sample increased levels of maternal depression, young age at child's birth, child's gender did not independently increase of odds for neglect. Parenting stress significantly increased the risk while psychological and physical IVP moderately increased the risk. Similarly increased levels of maternal depression, young age at child's birth, child's gender did not increase of odds for psychological aggression, however parenting stress and IVP both psychological and physical, significantly increased the risk.

Given the complex, interactive, multifaceted composition of families, one might conclude that high risk families are extremely vulnerable to internal and external stressors. The challenges associated with family violence may affect the ability of a mother to address the needs of her children, particularly if she endorses a history of abuse as a child and has a history of IPV. These negative experiences have the potential to affect the choices she makes in terms of choosing a partner and career, expressing needs and emotions and most important to this study; the perpetuation of maladaptive parenting practices often associated with child neglect and mother to child psychological abuse. The findings demonstrate one of the pathways that perpetuate violence within the family system and indicate the importance of developing evidence-based interventions to prevent and treat child neglect and mother to child psychological aggression.

Evaluation of the Study

The strengths of this study include the selection of a robust, longitudinal data base that employed a randomized control sampling technique. The study fits the available data and is part of a larger, comprehensive study interested in child outcomes. The sample

included an ethnically diverse population; providing generalizability to other settings and situations. In addition, the study sought out women in community based settings as opposed to women living in a shelter or safe house environment; providing a representative population of women to study.

The initial data collection activities took place over 12 years ago making the data appear somewhat antiquated. It also made the desire to go back and collect qualitative data impossible. However, when data was compared with current benchmarks, the statistics were consistent with current findings.

Secondary data analysis may contain biases in the data not readily apparent. The researcher did not directly collect the data. It was therefore unknown exactly how the questions were asked or if the respondent understood the question. In addition, because the data was not collected to answer a specific question of this researcher, information that may have been useful to the study was not collected. There is also the concern over whether data can be totally separated from the context of its collection.

Conceptual Framework

The explanations used are logical and coherent; informed by the conceptual framework of Lazarus (1999) and Scaer (2005). Testable claims are outlined and thoroughly discussed. The study reminded the reader of the need to identify *traumatic stress* of an individual based on the perceptions of the individual and the family system. It also served to identify, reinforce and emphasize the deleterious effects of depression on the entire family system.

Toward an Understanding of Family Violence

The findings of this study support the supposition that violence within the home increases the risk for future violence among family members specifically child neglect and mother to child psychological aggression. In addition to the perpetuation of violence, mental health outcomes including depression as well as an increase in levels of parental stress may result. This study found that mothers engaged in a violent intimate relationship demonstrated higher incidence of depressive symptoms than those not in a violent relationship. Similarly, physical and psychological abuse as a child was significantly related to the presence of depressive symptoms in the study participants. Finally at each data point within the study, a significant relationship between IPV and parental stress was observed. These findings suggest a potential relationship between negative life experiences sustained by mothers throughout their lifetimes and negative mental health outcomes such as depression. Significant relationships were also noted between previous abuse as a child, parental stress, depression, child maltreatment, specifically child neglect and psychological aggression.

Scaer's Theory of The Traumatic Spectrum along with Lazarus'Appraisal Theory informed this study and provided a conceptual framework to assist in discerning the impact stress and traumatic events have on an individual's health status. Within this framework, events that may or may not be considered life threatening at first glance, may need to be identified as traumatic; depending on the perception of the individual and the meaning that individual assigns to that event. Scaer (2005) notes that stress includes "any force of nature or experience that disrupts psychological equilibrium or homeostasis"

(p. 205). Under Scaer's definition, trauma falls under the category of stress when it disrupts homeostasis (though not all stress is traumatic). In addition to an individual's current life experiences, the theory seeks to address the individual's prior life experience thereby extending the definition of trauma, stress and traumatic stress. In viewing these experiences and behaviors on a continuum, stress becomes traumatic in the face of helplessness or lack of control; especially if the stress contains similarities to past traumas. This process creates a compound/ cumulative effect. Scaer proposes that events once considered negative life events may be a part of an extended continuum of trauma that extends from dramatic, life changing events to little traumas that may be underappreciated or unrecognized sources of malcontent that occur over a life time. He argues that the cumulative experiences of life's "little traumas" may shape every aspect of an individual's life from the choice of profession to the people we choose to spend time with. The premise of his theory is the belief in the brain-mind-body continuum; helping to explain the effects that emotions and life experiences have on the body. Traumatic and stressful experiences may potentially impair one's health; including the development of mental illnesses such as depression. The hallmark of depression: feelings of hopelessness and helplessness accompanied by a lack of control of one's life situation often define a stressful situation as traumatic.

This theory is invaluable when attempting to analyze the role family violence and the development of depression play in the initiation and perpetuation of child neglect and psychological aggression. In this study, depression was identified as an outcome associated with IPV, parental stress and previous childhood trauma. Maternal depression,

parental stress and previous childhood trauma were highly correlated with child neglect demonstrating the dramatic impact stress and traumatic events can have on an individual and family. These experiences foster a feeling of helplessness, hopelessness; making the mother feel she has no control over the events in her life. This is especially true for mothers who have experienced past traumas.

The literature is beginning to link child maltreatment including neglect and psychological aggression with stress that can disrupt early brain development; harming the nervous and immune system of the child. As a result, children who are neglected are a higher risk for health problems as adults including alcoholism, drug abuse, eating disorders, obesity, depression, suicide, sexual promiscuity, smoking and certain chronic diseases. These finding supports the current literature by adding additional evidence of the impact negative life events may have in determining and sustaining violence within the family system. Many studies have demonstrated the detrimental outcomes of children exposed to violence in the family. Laws have been established defining witnessing IPV as a reportable form of child abuse/neglect. Yet, the research and policy changes have not gone far enough to identify child neglect and psychological aggression as serious behaviors in need of rapid, direct intervention.

Implications for Practice

Child abuse and neglect remain topics of great public health concern. The United Nations (UN) Convention on the Rights of the Child (United Nations, 1989) places responsibility on participating states to protect the rights of children by ensuring they are protected from injury and abuse (Articles 13, 33, 34, 35, 36, and 37), have adequate

shelter (Article 27), nutrition, (Articles 24 and 27) and have the right to optimal development and survival (Article 6). Nurses, in their role as healthcare providers have a responsibility to the patients in their care and are charged by law to protect the rights of children directly or indirectly in their care. In addition to protecting children from abuse and neglect nurses in many states are mandated to assess women for violence in the home as violence places women and their children at risk for multiple untoward outcomes. However, (as noted in one study), only 38% of nurses when queried asked women if they feel safe at home. The hesitancy of nurses to ask questions that have the capacity to change the lives of all family members is concerning.

The findings of this study offer nurses empirical evidence in support of the mandatory laws protecting the rights of women and children to be free from abuse and neglect. However, evidence based decision making is a demanding practice, requiring much more than empirical knowledge. It is also important to consider the needs of the patient/family members, especially the mother; empowering her to be a collaborator in her care and decision making, ensuring the safety and security of herself and her children.

The results of this study answer many of the how, why, where, what, and when questions associated with family violence by providing nurses with a profile of a vulnerable population at risk for negative mental health outcomes and child maltreatment. This knowledge is invaluable when assessing women in various health care settings as it allows the nurse to confidently focus on establishing the presence or absence of violence and/or violence risk factors in the home. The goal of care includes ensuring the safety

and security of the patient (in this case the mother and her children) and the establishment of a realistic plan of care including accessible and affordable resources.

Many health care individuals choose not to notice the signs and symptoms of abuse in the family as they believe if they identify the presence of violence in the home, they have the responsibility to do something about it. It is not only the responsibility of the individual to intervene when violence in the family is uncovered; it is also the duty of the healthcare team to support the patient and family members. Healthcare models have made the transition from symptoms focused care to a holistic model of care that includes members of the interdisciplinary team. The information contained in this study offers healthcare providers with a detailed characterization of women and children at risk for family violence and untoward outcomes. It also encourages nurses to engage in a critical analysis and reflection of current practice, especially in the care of women and children at risk for violence. In conclusion, this study highlights the need for a universal assessment tool for all primary care, women's health and pediatric providers.

In addition to gaining confidence in the ability to assess women on what the patient may consider to be a very private, personal set of behaviors, this study offered an alternative framework for nurses to conceptualize the events associated with family violence; thereby providing an alternative paradigm to use when determining patient centered approaches to care. Scaer (2005) would consider the violence sustained by many of these mothers as children and young women traumatic. Trauma is becoming increasingly recognized as a significant factor in many health and social related problems. It is also one of the common denominators in victims of violence. Trauma-

informed care; a newly coined term in the last five years recognizes the importance of educating healthcare providers of the impact trauma has in the life of the victims by recognizing the survivors need to be respected, informed, connected and hopeful. Many health care organizations are beginning to utilize the principles of trauma informed care including the understanding of the vulnerabilities or triggers that victims of trauma may harbor, that traditional healthcare delivery systems may exacerbate and even re-traumatize the victim.

Educational Implications

This study identifies the need for more intensive, focused education on family violence, trauma and associated outcomes for healthcare providers within community and healthcare settings. The education should include the exploration of local resources for mothers, fathers, children, and families including social support, parenting skills based on the development needs of the child, assessment and treatment, web-based intervention and support, homecare and telephonic support. Finally, the need for healthcare providers to explore the critical, ethical issues surrounding family violence while engaging in reflective practice; exploring their own thoughts and feelings around this difficult issue would be of great value to them personally and professionally.

There is also a great need to educate and empower the public to not only recognize family violence and the maladaptive outcomes associated with behaviors such as IPV and maternal depression, but to impart the philosophy that violence and its deleterious outcomes are preventable. Though this study did not look at specific interventions to combat violence, parental stress or maternal depression it did

successfully provided a portrait of high risk postpartum women; adding to the empirical knowledge currently available to healthcare professionals.

Implications for Future Research

The ground work has been laid for nurse researchers to consider engaging in a transdisciplinary approach to research with teams interested in looking at family violence and the related topic of trauma from a holistic, integrative approach; using the information gleaned from recent research in the area of trauma and biologic basis of traumatic spectrum. Depression is an extremely complex disorder affected by multiple internal and contextual processes. To adequately examine the phenomenon of violence and the effects on family members including the perpetuation of violence and depression, a transdisciplinary approach as outlined by the National Institutes of Health is suggested. A transdisciplinary approach involves integrative science; drawing from multiple disciplines extending newly constructed conceptual models from research into practice and policy in an expedient, integrative fashion.

Scaer (2005) has moved the concept of traumatic spectrum forward in an effort to encourage researchers to study the mind, body connection between traumatic events and structural/hormonal changes evident in the study of chronic stress related illness. While the idea of learned helplessness allowed researchers to consider an alternative process at work in women exposed repeatedly to violence, the newest areas of interest include the relationship between trauma, depression, PTSD and the structural changes evident within the neuro-hormonal system. In addition to the consideration of an alternative approach to

research investigation, the following list is offered as suggestions for future research studies in the area of family violence and maternal depression:

1. The identification and exploration of mediating and moderating factors of maternal depression to determine and/or reveal the mechanisms through which the depression in the parent becomes associated with poor outcomes in children.
2. The identification of optimum timing for interventions including the initiation, duration and interventions to prevent child neglect.
3. The exploration of the factors that perpetuate intergenerational violence utilizing a longitudinal study design.
4. The exploration and discovery of socio-cultural-economic inequalities associated with maternal depression.
5. The conduction of a qualitative approach to explore and describe the decision making process of women that endorse chronic child neglect.
6. The exploration of the contribution of psychological aggression and childhood emotional abuse to teen dating practices.
7. The determination of the efficacy of utilizing a trauma informed care model in an acute care psychiatric mental health setting to promote the identification and treatment of individuals with a history of trauma and violence.

Final Thoughts

Violence is a part of the human experience and has been since the beginning of time. Violence is among the leading causes of death for individuals ages 15-44 worldwide. More than 1.6 million people die as a result of self-directed, interpersonal and

collective violence. "Despite the fact that violence has always been present, the world does not have to accept it as inevitable" (Krug et al., 2002). The CDC and WHO are committed to advancing a public health approach to the reduction of violence. It is the belief of these organizations that factors that contribute to violent responses; whether they are factors of attitude and behavior or related to larger social, economic, political and cultural conditions can be changed (Bellis, 2009). WHO recently published seven evidence-based briefings on violence prevention strategies, outlining recommendations towards reducing violence worldwide. These include:

1. Developing safe, stable, nurturing relationships between children and caregivers.
2. Developing life skills in children and adolescents.
3. Reducing the availability and harmful use of alcohol.
4. Reducing access to guns, knives and pesticides.
5. Promoting gender equality to prevent violence against women.
6. Changing cultural and social norms that support violence.
7. Victim identification, care and support.

If the goal of violence reduction is to be realized, a more aggressive approach, utilizing these prevention strategies is needed. Neglect and mother to child psychological aggression is harmful, unacceptable and ultimately preventable. Though neglect is often viewed as a hidden, complex phenomenon, it remains the most prevalent form of child maltreatment. The fact that it has been given a low priority on the continuum of abuse is intolerable. Similarly, the belittling, shaming, rejection, threatening and judging associated with mother to child psychological aggression, though reported less often, are

frequently equally damaging to the developing child. When a child is forced to witness IPV, abuse of a sibling, grandparent or pet within their home (also forms of psychological aggression), they too are at risk for untoward outcomes. The use of psychological aggression has been shown to interfere with the mental, physical, social and cognitive development of a child. The physical and mental health of families is dependent on changing behaviors associated with violence through continued research and the establishment, implementation and evaluation of empirically based programs for at risk families. Gabriela Mistral an award winning educator and poet appreciates the immediacy of the problem of children and violence throughout the world. She wrote:

> We are all guilty of many errors and many faults but our worse crime is abandoning the children, neglecting the fountain of life. Many of the things we need can wait. The child cannot. Right now is the time his bones are being formed, his blood is being made and his senses are being developed. To him we cannot answer: 'tomorrow.' His name is Today (Tapscott, 2002).

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Appendix A

Permission to Use Measurement Tool

Rady Children's Hospital San Diego

Child & Adolescent Services Research Center
3020 Children's Way • MC 5033 • San Diego, California 92123-4282
(858) 966-7703 • FAX (858) 966-7704 • www.casrc.org

October 1, 2008

Institutional Review Board
University of San Diego
5998 Alcala Park
San Diego, CA
92110

To Whom It May Concern:

I am writing to indicate that Ms. Kristen Lampert has permission to utilize data from the study entitled "Healthy Families San Diego Clinical Trial" for her doctoral dissertation chaired by Cynthia D. Connelly, PhD.

If you have any questions, please do not hesitate to contact me at (858) 966-7703 or at JLANDSVERK@aol.com.

Sincerely,

John Landsverk, PhD
Principal Investigator

Appendix C

Measures

Instruments: The Conflict Tactics Scales (CTS), The Revised Conflict Tactics Scales (CTS 2), and The Conflict Tactics Scales Parent Child (CTS PC).

Developed by: Straus, M., Hamby, S., McCoy, S., Sugarman, D., Finklelhor, D., Moore, D., & Runyan, D.

Reference: Straus, M., Hamby, S., Finkelhor, D., Moore, D., & Runyan, D. (1998). Identification of child maltreatment with the parent-child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse and Neglect, 22,* 249–270.

Description: The CTS (original scales) and CTS 2 (revised scales) are widely accepted instruments used to evaluate violence within families, specifically intimate relationships. The CTS 2 includes 78 items, half referring to the respondent's behavior and half to partner's behavior using an 8 point scale. The CTS PC is used to evaluate child maltreatment and parent-to-child violence. It is composed of 35 items focused on the respondent's behavior with her child, several inquiring about parent's own experiences as a child.

Availability: These instruments are not in the public domain. They are available for purchase through:

Western Psychological Services
12031 Wilshire Blvd.
Los Angeles, CA 90025-1251
(800) 648-8857

Instrument: Parent Stress Index- Short Form (PSI-SF)

Developed by: Abidin, R.

Reference: Abidin, R. (1995). *Parenting stress index: Professional manual (3rd ed.).* Lutz, FL: Psychological Assessment Resources.

Description: The PSI-SF consists of 36 items derived from the Parenting Stress Index (PSI) which comprise three scales: Parental Distress, Difficult Child Characteristics, and Dysfunctional Parent-Child Interaction designed to identify potentially dysfunctional parent-child systems.

Availability: This instrument is not in the public domain. It is available for purchase through:

Psychological Assessment Resources
1-800-331-8378
www.parinc.com

Instrument: Center for Epidemiology Studies for Depression Scale (CES-D)

Developed by: Radloff, L. National Institute of Mental Health

Reference: Radloff, L., (1977). The CES-D scale: A self report depression scale for research in the general populatio'. *Applied Psychological Measurement*, 1, 385-401.

Description: The CES-D scale is designed to measure depressive symptoms in the general population (non-psychiatric individuals over the age of 18). The scale consist of a 20-item self-administered scale and measures the primary components of depressive symptomatology including depressive mood, feelings of guilt and worthlessness, psychomotor retardation, loss of appetite and sleep disturbance screening during the past week.

Availability: The CES-D is in the public domain and therefore may be used without copyright permission. The CES-D can be viewed on the following internet sites:

http://counsellingresource.com/quizzes/cesd/index.html

http://www.chcr.brown.edu/pcoc/cesdscale.pdf

http://patienteducation.stanford.edu/research/cesd10.pdf

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually *don't bother me.*	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that *everything* I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12 I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14 I felt lonely.	☐	☐	☐	☐
15. *People were unfriendly.*	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column. 1 for answers in the second column. 2 for answers in the third column. 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.